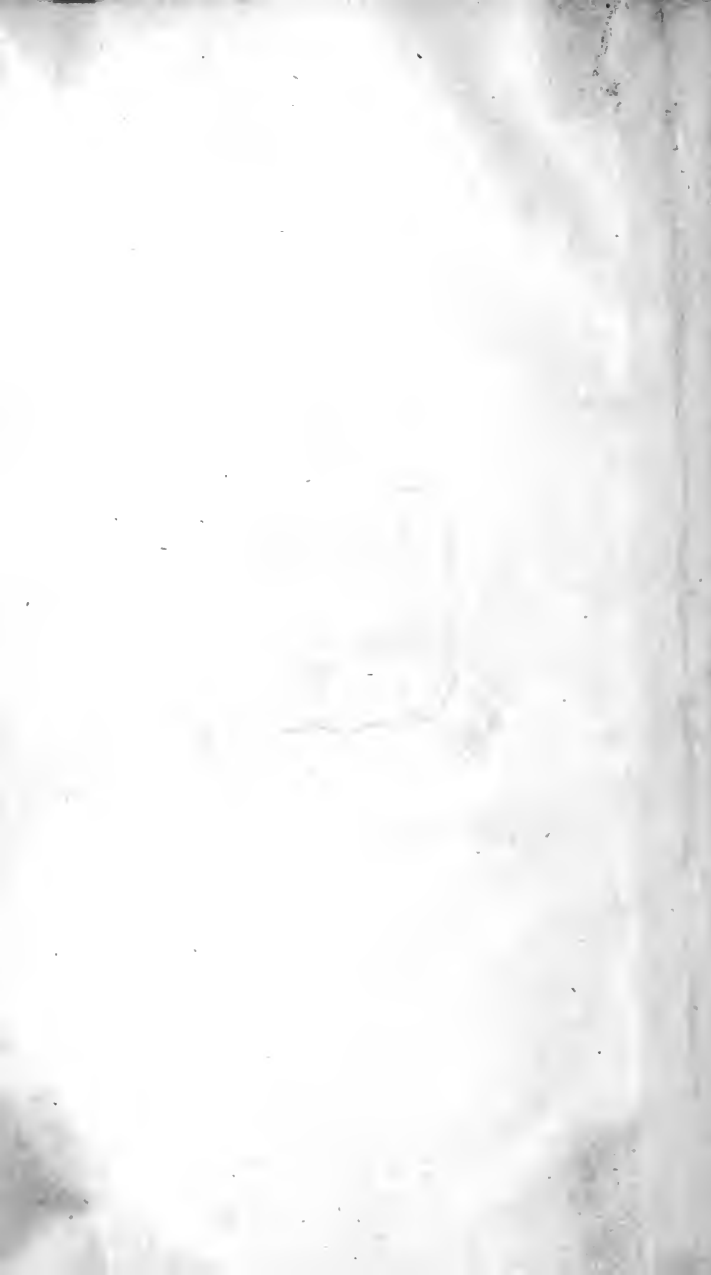




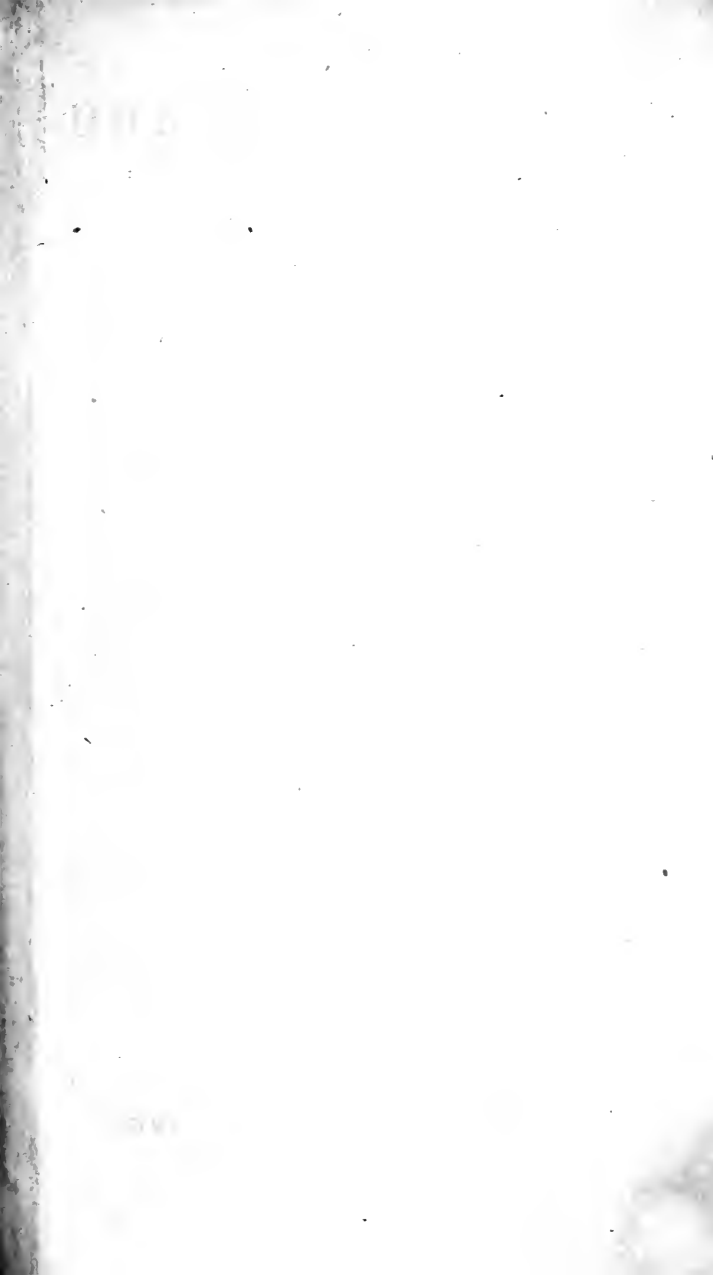


ALEXANDER TROTTER, ESQ<sup>r</sup>

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# THE BRITISH ALMANAC

OF

THE SOCIETY FOR THE DIFFUSION OF USEFUL  
KNOWLEDGE

FOR THE YEAR

1829.

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## PRELIMINARY OBSERVATIONS.

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THE SOCIETY for the DIFFUSION of USEFUL KNOWLEDGE, on the 1st of January last, submitted to the public the BRITISH ALMANAC for 1828. This was almost the first attempt in this country to produce an Almanac that should not only be useful to all classes, and of which the information should be wholly of a popular character, but which should be purified from the superstitions, prejudices, and indecencies which have characterized some of the Almanacs of which the circulation has been the most extensive. By a Parliamentary Return of the year 1828, we find that the Stamp Duty paid upon the Almanacs of England amounts to £30,136. 3s. 9d.—which, the duty being *Fifteen-Pence* upon each Almanac, exhibits a circulation of 451,593 annually. It may be safely asserted that two-thirds of these publications contain some large portion of the matter just described; and they thus keep alive a spirit of ignorance, utterly opposed to the desire for sound and practical information, which distinguishes our own times.

The SOCIETY'S ALMANAC for 1828, although published when the year had commenced, had a very large sale. The success of this attempt convinced the Committee that a large body of their countrymen have no taste for those astrological absurdities, by which their understandings had been habitually insulted. The information which their ALMANAC supplies is applicable to the wants of all classes of persons. Its conductors pretend not to foretell the weather, because the science of meteorology is far too imperfect to furnish the means of any calculations, beyond very general inferences, from the course of past seasons to the probable aspect of the future. They profess no knowledge of future political events, because these depend upon the thoughts and actions of men, and are utterly unconnected with the movements of the heavenly bodies, upon which the ignorance and superstition of dark ages fancied them to hinge. The place of such vain and hurtful, because misleading speculations, is supplied by pure and useful information; and the whole quantity of matter in this ALMANAC is increased to more than twice that of the old ones. To supply a variety of Tables which almost every man engaged in the world requires, *twelve pages* have been added to the ALMANAC of the present year;—the price has necessarily been increased to 2s. 6d.

The matters contained in this Almanac are truly USEFUL and of indispensable necessity; and whatever is technical is explained with clearness and brevity. By an equal attention to the exclusion of everything that can be injurious, and to the introduction of whatever is important to be known for the guidance of the daily transactions of the coming year, the Society's Almanac, as far as is possible in such a publication, will, it is trusted, promote the growth of sound knowledge.

## EXPLANATORY REMARKS.

### *Observations on the Weather.*

THERE is, perhaps, no subject of more universal interest in the whole range of natural knowledge than that of the unceasing fluctuations which take place in the atmosphere in which we are immersed. The interest, the health, the enjoyment, or the convenience of every one is, more or less, constantly affected by the weather, and the general anxiety hence arising gives rise to perpetual endeavours to prognosticate its changes. In this, as in more important matters, the curiosity and credulity of the ignorant have been made the sport of the artful and designing; and prophecies upon this subject, if less injurious than upon others, have certainly not been less absurd.

But although we neither pretend to prophesy ourselves, nor to teach the art of prophesying to others, we are of opinion that useful anticipations may be formed upon the safe principle, that *like causes always produce like effects*. It is thus that we anticipate cold in winter and heat in summer; and, for reasons not quite as obvious, but which will be hereafter explained, we expect the driest winds in March, and a period of heavy rain in July. We abjure the legend of St. Swithin, but do not doubt the experience upon which it was engrafted. We have great respect, also, for the judgment of the gardener and the mariner upon atmospheric changes; for they form their opinions upon constant observations of phenomena which escape the attention of those who are less exposed to their influence. Observations such as these, science will aid and extend, not change; and, we doubt not, that if the same pains were taken to spread the knowledge of useful inventions in this department of science, as have hitherto been devoted to perpetuate error, the spirit of inquiry, assisted by such artificial means, would largely extend our knowledge of Meteorology and its useful applications. Of the advantages of such an union, we have a remarkable instance in our own days, in the adoption of the Marine Barometer. Even common sailors are now acquainted with the use of this instrument, and to its timely warnings many a valuable ship is acknowledged to owe its preservation.

Such useful knowledge in this department of nature, it will be our aim to substitute for the absurdities with which the popular almanacs have hitherto been disfigured. The unfolding of our plan we must leave to time; for few people can be aware of the extent of the information which may be extracted from the works of different individuals who have made this subject their study: this information, however, has never been collected into a popular form; but it shall be our endeavour to divest it of such unnecessary obscurity as the less learned are subject to find in the observations of scientific men.

As we have reason to believe that this second number of the Almanac will be in the hands of many who have not seen the first, we shall here reprint the explanation of the terms in which the following observations are recorded; referring, for a more full account of the practical use which may be made of them, to the COMPANION TO THE ALMANAC, and the Treatises on meteorology. The principal observations consist of the *average* or *mean* state of the atmosphere in the different months in regard to pressure, temperature, and moisture; and of the extremes to which it is liable in these respects.

The Barometer, by which the first is measured, is an instrument now too well known to require description in the limited space to which this explanation must necessarily be confined. The observations are recorded in inches and thousandth parts of an inch of mercury. The Thermometer, by which

the variations of heat are ascertained, is also generally known. The temperature registered is that of the air in the shade: but, besides this, the power of the sun's rays is recorded, and the force of terrestrial radiation; which we cannot here further explain than by describing it as the cold produced at night upon a plot of short grass exposed to the full aspect of the sky; where the temperature, in clear and calm weather, is always considerably below that of sheltered situations. The Hygrometer, by which the state of the atmosphere is ascertained with regard to moisture, is not as generally known as the two preceding instruments, and will, hereafter, require a full description: it must be sufficient, at present, to remark, that it is a contrivance by which the degree of temperature is readily noted at which moisture begins to be deposited upon a cold body: as we see in summer in the familiar instances of a bottle of wine brought from a cellar, or a decanter of water fresh filled from a well. This degree is called the *dew-point*; and from it the degree of dryness may be accurately calculated, and the force or elasticity of the atmosphere of steam, which is always mingled with the air.

The mean state of the atmosphere, calculated for definite periods from numerous observations, being that state in which all disturbing causes are equally balanced, may be considered, when it occurs, as least liable to sudden alteration; and whenever, on the contrary, the different instruments indicate an approach to extremes, reason, as well as experience, teach us to expect a change. Rapid alterations, also, are indicative of violent disturbances, and a sudden approach to one extreme is generally speedily followed by a change to the opposite. This is the first use to which these observations may be applied, and the only one which our present limits will allow us to indicate. The averages have been calculated for London; but they will apply to a very large circle around; and we shall hereafter show how they may be corrected for any situation in the United Kingdom.

---

*Explanation of the columns headed "Length of day," "Day's increase or decrease," "Day breaks," and "Twilight ends."*

THE column headed "Length of day," contains the number of hours and minutes between sun-set and sun-rise, and is found by doubling the number of hours and minutes after noon, at which the sun sets. The column headed "Day's increase," expresses the number of hours and minutes, which the day has *increased* since the shortest day; and where the column is headed "Day's decrease," it expresses the number of hours and minutes, which the day has *decreased* since the longest day: for example, the length of the longest day in 1829 is put down in the column "Length of day" at 16h 34'. and on the 6th of July following, we find that the length of the day, or the number of hours and minutes between sun-set and sun-rise, is set down at 16h 24': hence the day has decreased 10' since the longest day, and accordingly in the column "Day's decrease," we find opposite July the 6th, 0h 10'.

Twilight is the faint light which precedes sun-rise, and follows sun-set. It is caused by the refraction and reflection of the sun's rays by our atmosphere. Day is said to break when twilight commences. Twilight is generally supposed to exist when the sun is 18 degrees, or less, below the horizon of any place, or 108° distant from the zenith: on this supposition our tables are founded. The times of its commencement and end, inserted in the two columns headed "Day breaks," and "Twilight ends," are obtained by resolving an oblique angled spherical triangle, in which the three sides are given to find an angle, which is called an *hour angle*; this angle expresses the number of hours and minutes from apparent noon at which twilight begins and ends. But though twilight is generally supposed to commence when the sun is 18° below the horizon, yet what is commonly called "Day break;" that is, when the darkness of night gives place to a faint yet perceptible light in the East, rarely occurs until the sun is within about 10° of the horizon.

*Explanation of the Column of the Position of the principal Planets, &c.*

IN the Almanac of this year we have given the position with respect to the horizon and meridian, of the most remarkable Stars and Constellations visible on the first and fifteenth days of every month, at nine o'clock in the evening. If their positions are required for any other day, they may be easily found by a reference to the

position on that day of any star or constellation said to be on the meridian, or near to it, on the day nearest to the given day at 9h, in the following manner:—Suppose that the position of the star Sirius is required on the 7th of February in this year: we find, on consulting the Almanac, that a star having nearly the same *right ascension* as Sirius is set down as passing the meridian at nine o'clock in the evening on the 15th of February; now as this star passes the meridian of any place about four minutes sooner every night, it will pass the meridian on the 7th,  $4' \times 8$ , or  $32'$  later than on the 15th, at or about half past nine: therefore, at nine in the evening of the 7th, Sirius will be found half an hour distant from the meridian towards the East, and consequently all the other stars, &c. whose positions are given for the 15th, will be on the 7th half an hour in time farther towards the East, a distance of no account, when the object is only to identify the star, &c. named. If the student have in his possession a celestial globe, he will find no difficulty in placing Sirius in the proper position, with respect to the brazen meridian, to show its place on the 7th, by means of the brazen hour circle attached to the axis of the globe; when Sirius is so placed, the situations of all the other stars and constellations whose positions are given for the 15th of February may be seen by consulting the points of the compass marked on the paper horizon of the globe. For the purpose of giving some idea of the altitudes or heights above the horizon, of the different stars and constellations at the given times, a line supposed to be drawn from the horizon to the zenith, or point over our heads, is conceived to be divided into four parts, and the points of division to be marked, from the horizon upwards, by the three fractions  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ . The altitude of a star, &c. on or very near the horizon, is marked 0, of a star in or near the zenith, Z, of a star  $\frac{1}{4}$  of the whole line above-mentioned distant from or above the horizon,  $\frac{1}{4}$ ; and so also, if the star be nearer to  $\frac{1}{4}$  than to the horizon, or to  $\frac{1}{4}$  than  $\frac{1}{2}$ , its altitude is still marked  $\frac{1}{4}$ : the same remark applies to stars near the zenith. For example, when we write Perseus E b S, H  $\frac{3}{4}$ , we mean that the constellation of Perseus is to be found, at the particular time named, in the E b S quarter of the heavens, and that the height or altitude of its centre above the horizon is about  $\frac{3}{4}$  of the line passing through it, drawn from the horizon to the zenith: this constellation therefore, at this time, should neither be marked Z nor  $\frac{1}{2}$ , as its position is nearer to the  $\frac{3}{4}$  division than to any other mark.

The hours and minutes given, marked S, are the *right ascension* of the stars which pass the meridian of Greenwich *exactly* at 9 in the evening of the given day; the term *right ascension* will be explained in the Treatise on Astronomy. Our object in giving these positions of stars, &c. is to enable any person who is acquainted with the points of the compass, to find all the most remarkable stars and constellations in sight at the time of observation without difficulty. If the time of observation be a certain number of hours before or after 9 h., all the stars will be found so many hours to the east or west of the 9 o'clock position for that evening. The positions given in the Almanac, though calculated for Greenwich, will serve well enough for any place in Great Britain or Ireland; as they have no pretensions to great accuracy.

### *Equation of Time.*

MANY persons suppose that they may, at all times of the year, set their clocks by the sun-dial; but this can only be done with the assistance of the column in the Almanac, headed "Equation of Time," except at four periods of the year, namely, on or about the 15th of April, the 1st of September, the 24th December, the 15th of June. At all other times, the column, *Equation of Time*, ought to be consulted; and when *clock after sun* is written above the number of minutes and seconds opposite to the day, then the clock ought to be set so much slower than the sun-dial, and the contrary; as for example, on the 3rd of June in this year the clock should be set two minutes and fourteen seconds slower than the time shewn by the sun-dial; and, on the contrary, on the 26th of June, the clock should be set two minutes and twenty-five seconds faster, the words *clock before sun*, being, in this case, written above the difference.

### *Explanation of the Columns, "Moon's Duration."*

THE presence, or absence, of the Light of the Moon, are indicated by lines referring to each hour of the night. This enables the reader, at one glance, to see what hours are light, and what dark, in any given night, without computation. Thus, on the 23rd of January from midnight till eight o'clock in the morning, when the sun has risen, the moon is up, which is shewn by the columns of each hour not having any black lines across;—but on the evening of the same day, after sun-set, we find the hour columns, from 4 to 5, 5 to 6, 6 to 7, 7 to 8 with black lines across, and those hours are therefore dark: the column 8 to 9 is about a quarter dark; the moon then rising at a quarter past 8. The *quantity* of moonlight is known by referring to the next column of "*The Moon's Age*."



## PRELIMINARY NOTES FOR THE YEAR.

Dominical Letter	-	-	D.
Golden Number	-	-	6
Cycle of the Sun	-	-	18
The Epact	-	-	25
Roman Indiction	-	-	2
Julian Period	-	-	6542
Septuagesima Sunday	-	Feb. 15	
Shrove Sunday	-	March 1	
Easter Day	-	April 19	
Whit Sunday	-	June 7	
Trinity Sunday	-	14	
Advent Sunday	-	Nov. 29	

THE FOUR QUARTERS OF THE YEAR.			
SPRING Quarter,	Mar. 20 <sup>d</sup> 8 <sup>h</sup> 37 <sup>m</sup> after.		
SUMMER	June 21 6 8 after.		
AUTUMNAL	Sept. 23 8 17 morn.		
WINTER	Dec. 22 1 19 morn.		

The Year 1829 is the first after Leap Year.

## ECLIPSES IN 1829.

March 20, MOON eclipsed, *invisible* at Greenwich.

April 3, SUN eclipsed, *invisible* at Greenwich.

Sept. 13, MOON eclipsed, *partly visible* at Greenwich.

Eclipse begins, 25m. after 5 in the morn.; ends, 49m. after 7.

Digits eclipsed, 6° 5' on the Moon's Southern Limb, or from the Northern side of the Earth's shadow.

Sept. 28, SUN eclipsed, *invisible* at Greenwich.

## HOLIDAYS KEPT AT THE PUBLIC OFFICES IN 1829.

## CUSTOM-HOUSE, EXCISE, &amp; STAMP OFFICE.

Good Friday, April 17.

King's Birth-day, kept April 23.

Restoration King Charles II. May 29.

Coronation, July 19.

Christmas Day, December 25.

## INDIA HOUSE.

The Treasurer's and Accomptant's Offices keep the same Holidays as the Customs, but the Transfer Office keeps the same days as the Bank.

## EXCHEQUER, BANK, and SOUTH-SEA HOUSE.

(Any Holiday falling on a Sunday, is kept on the Monday, excepting Saints Days)

## JANUARY.

Day.	Occasion.	Excheq.	Bank & S.S.Ho.
Th 1	Circumcision	k	k
Tu 6	Epiphany	k	k
S 25	Conversion of St. Paul	k	k
Th 29	George IV. accession	k	k
F 30	Charles I. martyrdom	k	k
S 31	George IV. proclaimed	k	—

## FEBRUARY.

M 2	Purif. B.V. M.	k	k
S 14	Valentine	k	—
Tu 24	St. Matthias	k	—

## MARCH.

S 1	St. David	k	—
Tu 3	Shrove-Tuesday	k	—
W 4	Ash-Wednesday	k	k
W 25	Lady Day	k	k

## APRIL.

F 17	Good Friday	k	k
M 20	Easter Monday	k	k
Tu 21	Easter Tuesday	k	k
W 22	Easter Wednesday	k	—
Th 23	St. Geo., King's birth-d.	k	k
S 25	St. Mark	k	k

## MAY.

F 1	St. Philip and James	k	k
Th 28	Ascension, Holy Thurs.	k	k
F 29	Charles II. Restored	k	k

## JUNE.

M 8	Whit Monday	k	k
Tu 9	Whit Tuesday	k	k
W 10	Whit Wednesday	k	—

Day.	Occasion.	Excheq.	Bank & S.S.Ho.
Th 11	St. Barnabas	k	k
W 24	St. John Baptist	k	k
M 29	St. Peter and Paul	k	k

## JULY.

W 15	St. Swithin	k	—
S 19	Geo. IV. crowned	k	k
S 25	St. James	k	k

## AUGUST.

S 1	Lammas	k	k
M 24	St. Bartholomew	k	k

## SEPTEMBER.

W 2	London burnt	k	k
M 14	Holy Cross	k	—
F 18	George I. & II. landed	k	—
M 21	St. Matthew	k	k
Tu 29	St. Michael	k	k

## OCTOBER.

S 18	St. Luke	k	k
W 28	St. Simon and Jude	k	k

## NOVEMBER.

S 1	All Saints	k	k
M 2	All Souls	k	—
W 4	King William landed	k	k
Th 5	Powder-plot	k	k
M 9	Lord Mayor's Day	—	k
M 30	St. Andrew	k	k

## DECEMBER.

M 21	St. Thomas	k	k
F 25	Christmas Day	k	k
S 26	St. Stephen	k	k
S 27	St. John	k	k
M 28	Innocents	k	k

## TERMS AND RETURNS, 1829.

HILARY TERM begins January 23—Ends February 12.

	Essoign.	Exc.	Ret.	Appear.
In 8 Days of St. Hilary .....	Jan. 20	21	22	23 Frid.
In 15 Days of St. Hilary .....	27	28	29	30 Frid.
On the Morrow of the Purification .....	Feb. 3	4	5	6 Frid.
In 8 Days of the Purification .....	9	10	11	12 Thur.

EASTER TERM begins May 6—Ends June 1.

	May	June	June 1.	
In 15 Days of Easter .....	3	4	5	6 Wed.
From Easter Day in 3 Weeks .....	10	11	12	13 Wed.
From Easter Day in 1 Month .....	17	18	19	20 Wed.
From Easter Day in 5 Weeks .....	24	25	26	27 Wed.
On the Morrow of the Ascension .....	29	30	31	June 1 M.

TRINITY TERM begins June 19—Ends July 8.

	June	July	July 1	
On the Morrow of the Holy Trinity .....	15	16	17	19 Frid.
In 8 Days of the Holy Trinity .....	21	22	23	25 Thur.
In 15 Days of the Holy Trinity .....	29	30	July 1	2 Thur.
From the Day of the Holy Trinity in 3 Weeks ..	July 5	6	7	8 Wed.

MICHAELMAS TERM begins Nov. 6—Ends Nov. 23.

	Nov.	Nov. 23.		
On the Morrow of All Souls .....	3	4	5	6 Frid.
On the Morrow of St. Martin .....	12	13	14	16 Mon.
In 8 Days of St. Martin .....	18	19	20	21 Sat.
In 15 Days of St. Martin .....	25	26	27	28 Sat.

*N. B.* No Sittings in Westminster Hall on the 2d of February, Ascension Day, and Midsummer Day.—The Exchequer opens eight days before any term begins, except Trinity, before which it opens but four days.

*Note.* The first and last days of every Term are the first and last days of Appearance.

## OXFORD TERMS.

	Begin.	Ends.
Hilary Term .....	Jan. 14.	Apr. 11
Easter Term .....	Apr. 29.	June 6
Trinity Term .....	June 10.	July 11
Michaelmas Term .....	Oct. 10.	Dec. 17

The Act will be July 7.

## CAMBRIDGE TERMS.

	Begin.	Divides.	Ends.
Hilary Term .....	Jan. 13.	Feb. 25. m.	Apr. 10
Easter Term .....	Apr. 29.	June 4. n.	July 10

Mich. Term. Oct. 10. . Nov. 12. m. . Dec. 16  
The Commencement will be July 7.

## TERMS IN ENGLAND

Usually taken in Leases.

25 March. Ladyday | 29 Sept. Mich. Day  
24 June. . . . . Midsum. | 25 Dec. Christmas

## IN SCOTLAND.

Candlemas. Feb. 2 | Lammas. . . Aug. 1  
Whitsunday\* May 15 | Martinmas. Nov. 11  
\* This term, in Scotch leases, does not depend upon the moveable Feast of Whitsuntide, but is permanent.

## TRANSFER DAYS.

## AT THE BANK.

Dividends

Stock—Tues. Thurs. and Frid. . . . .	due.
3 per Cent. Reduc.—Tues. Wed. Thurs. and Frid. . . . .	Apr. 5, Oct. 10
3 per Cent.—Tues. Thurs. & Frid. . . . .	
3 per Cent. 1726—Tues. & Thurs. . . . .	Jan. 5, July 5
3 per Cent. Cons.—Tues. Wed. Thurs. and Frid. . . . .	

3 per Cent. Cons.—Tues. Wed. Thurs. and Frid. . . . .	Apr. 5, Oct. 10
Long. Ann. to Jan. 1860.—Mon. Wed. and Sat. . . . .	

4 per Cent. New.—Tues. Wed. Thurs. and Frid. . . . .	Jan. 5, July 5
4 per Cents. 1826—Mon. Wed. and Frid. . . . .	Apr. 5, Oct. 10

Life Annuities, if transferred between Jan. 5, and Apr. 4, or between July 5 and Oct. 9 . . . . .	Jan. 5, July 5
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If transferred between Apr. 5, and July 4, or between Oct. 10, and Jan. 4 . . . . .	Apr. 5, Oct. 13
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## AT THE SOUTH SEA HOUSE.

Div. due.

3 per Cents. Mon. Wed. and Friday . . . . .	Jan. 5, July 5
3 per Cent. Old Ann.—Mon. Wed. and Frid. . . . .	Apr. 5, Oct. 10
3 per Cent. New Ann.—Tu. Th. & Sa. . . . .	Jan. 5, July 5
3 per Cent. 1751—Tues. & Thurs. . . . .	

## AT THE EAST INDIA HOUSE.

Stock—Tuesday, Thursday, and Saturday . . . . .	Jan. 5, July 5
Interest on India Bonds, due . . . . .	Mar. 31, Sept. 30

Tickets for preparing Transfer of Stock must be given in at each Office before 1 o'clock.—At the East India House before 2.

Private Transfers may be made at other times than as above, the Books not being shut, by paying at the Bank and India House 2s. 6d. extra for each Transfer.—At the South Sea House, 3s. 6d.

Transfer at the Bank must be made by half-past 2 o'clock; at India House by 3; at South Sea House by 2—on Sat. by 1.

# QUARTER SESSIONS.

IN THE SEVERAL COUNTIES OF ENGLAND AND WALES.

**BEDFORD**—Jan. 14, Ap. 29, July 15, Oct. 21.  
**BERKS**—*Reading*, Jan. 13. *Newbury*, April 28—*Abingdon*, July 14, Oct. 20.

**BRISTOL CITY** (same as *Somerset*).  
**BUCKS**—*Aylesbury*, Jan. 15, April 30, July 16, Oct. 22.

**CAMBRIDGE**—County, *Cambridge*, Jan. 16, May 1, July 17, Oct. 23. For the Town, the day before.

**CHESHIRE**—*Chester*, Jan. 12, April 27, July 13, Oct. 19.

**CORNWALL**—(same as *Berks*).

**COVENTRY**—(same as *Cheshire*).

**CUMBERLAND**—*Cockermouth*, Jan. 13. *Carlisle*, April 28, July 14. *Penrith*, Oct. 20.

**DERBYSHIRE**—*Derby* (same as *Berks*).

**DEVONSHIRE**—*Exeter* (same as *Berks*).

**DORSETSHIRE**—*Dorchester*, (as *Berks*).

**DURHAM**—(same as *Cheshire*).

**ELY**, Isle of—*Wisbeach*, Jan. 14, July 15, Ely, April 30, Oct. 22.

**ESSEX**—*Colchester* and *Harwich*, (same as *Cheshire*.) *Chelmsford*, (same as *Berks*).

**EXETER**, CITY, (same as *Cheshire*).

**GLOUCESTERSHIRE**—*Gloucester* (as *Berks*).

**HAMPSHIRE**—*Winchester* (same as *Berks*).

**HEREFORDSHIRE**—*Hereford* (as *Berks*).

**HERTFORDSHIRE**—*Hertford*, (same as *Cheshire*.) *St. Alban's*, the same week.

**HUNTINGDONSHIRE**—(same as *Berks*).

**KENT**—*Maidstone*, Jan 15, Ap. 28, July 16, Oct. 20. *Canterbury*, Jan. 13, May 1, July 14, Oct. 23.

**LANCASHIRE**—*Lancaster* (same as *Berks*). Adjournments are held at *Preston*, at *Salford*, and at *Liverpool*.

**LEICESTERSHIRE**—*Leicester*, (as *Cheshire*).

**LINCOLNSHIRE**.—*Parts of Lindsey.*

Date.	City.	Kirton.	Louth.	Spilsby.
January	17	Tu. 20	....	Fr. 16
May	2	Tu. 5	Fr. 1	....
July	18	Fr. 17	....	Tu. 21
October	24	Fr. 23	Tu. 27	....

*Parts of Keelven.* *Parts of Holland.*

Date.	Bourn.	Sleaford.	Boston.	Spalding.
January	Tu. 13	Th. 15	Tu. 13	Th. 15
April	Tu. 28	Th. 30	Tu. 28	Th. 30
July	Tu. 14	Th. 16	Tu. 14	Th. 16
October	Tu. 20	Th. 22	Tu. 20	Th. 22

**MIDDLESEX AND LONDON**.—The Sessions for Middlesex and London are held eight times a year; four of these Sessions (called Quarter Sessions,) are held as near to the times prescribed by the Statute as convenience will admit; the other four, termed General Sessions, are taken in the intervening periods. The exact times are fixed by the Court of Aldermen for each year.

**MONMOUTHSHIRE**—*Ushe*, same (as *Cheshire*).

**NORFOLK**—*Norwich*, at the Guildhall, Jan. 13, April 28, July 14, Oct. 20. At the Shire House, Jan. 14, April 29, July 15, Oct. 21.

**NORTHAMPTONSHIRE**—*Northampton*, Jan. 15, April 30, July 16, Oct. 22. *Peter-*

*borough*, Jan. 14, April 29, July 15, Oct. 21.

**NORTHUMBERLAND**—*Morpeth*, Jan. 15, April 30. *Hexham*, July 17. *Newcastle on Tyne*, Oct. 21. *Alnwick*, Oct. 21. *Berwick*, Oct. 24.

**NOTTINGHAMSHIRE**—County, Jan. 12, April 27, July 13, Oct. 19. Town, three days after.

**OXFORDSHIRE**—*Oxford*, (same as *Cheshire*).

**RUTLANDSHIRE**—*Okeham*, (same as *Bucks*).

**SHROPSHIRE**—*Shrewsbury* (s. as *Cheshire*).

For the Town, the day before.

**SOMERSETSHIRE**—*Wells*, Jan. 12, April 27. *Bridgewater*, July 13. *Taunton*, Oct. 19.

**STAFFORDSHIRE**—*Stafford*, (s. as *Bedford*).

**SUFFOLK**—*Beccles*, Jan. 12, April 27, July 13, Oct. 19. *Woodbridge*, Jan. 14, April 29, July 15, Oct. 21. *Ipswich*, Jan. 16, May 1, July 17, Oct. 23. *Bury*, Jan. 19, May 4, July 20, Oct. 26.

**SURREY**—*New Scissions House*, *Newington*, Jan. 13. *Ryegate*, April 28. *Guildford*, July 14. *Kingston*, Oct. 20.

**SUSSEX**—*Petworth*, Jan. 13, May 28, Oct. 20. *Horsham*, July 14. *Lewes*, Jan. 15, May 30, July 16, Oct. 22. *Chichester*, Oct. 24.

**WARWICKSHIRE**—*Warwick*, (as *Berks*).

**WESTMINSTER**—City, are generally held on the Thursday preceding the Monday of the Quarter Sessions for *Middlesex*.

**WESTMORELAND**—*Appleby*, (same as *Bedf.*)

**WILTSHIRE**—*Devizes*, Jan. 13. *Salisbury*, April 28. *Warrminster*, July 14. *Marlborough*, Oct. 20.

**WORCESTERSHIRE**—*Worcester*, (same as *Cheshire*).

**YORKSHIRE**—*York City*, Jan. 16, May 1, July 17, Oct. 23. *St Peter's Liberty*, Jan. 17, May 2, July 18, Oct. 24.—

**EAST RIDING**: *Beverley*, Jan. 13, April 28, July 14, Oct. 20.—**WEST RIDING**:

*Wetherby*, Jan. 13. *Wakefield*, Jan. 15. *Doncaster*, Jan. 21. *Pontefract*, April 27. *Skipton*, July 14. *Bradford*, July 23. *Rotherham*, July 29. *Knaresborough*, Oct. 20. *Leeds*, Oct. 22. *Sheffield*, Oct. 28.

**NORTH RIDING**: *Northallerton*, Jan. 13, April 28, July 14, Oct. 20.—**ARCHBISHOP'S** Quarter Sessions for the Liberty of *Cawood*, *Wistow*, and *Otley*: *Otley*, Jan. 14, April 29, July 15, Oct. 21. *Cawood*, April 29, Oct. 21.

*The Quarter Sessions through NORTH and SOUTH WALES are held as follow:*

The first whole Week after Epiphany, the 6th Jan.; first Week after Easter-week; the first Week after the Translation of St. Thomas à Becket, or July 7; and the first Week after the 11th October. This is the principle upon which the Sessions throughout England are, in nearly all cases, fixed by statute. The magistrates determine the day of the week on which the sessions shall commence—as *Bedford*, Wednesday; *Berks*, Tuesday; *Lucks*, Thurs.; *Cambridge*, Friday; *Cheshire*, Monday.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 3h. 45' S; Orion's Belt SEbS, H  $\frac{1}{2}$ ;  
Sirius SE, H  $\frac{1}{2}$ ; Procyon ESE, H  $\frac{1}{2}$ ; Ge-  
mini E, H  $\frac{1}{2}$ ; Ursa Major NNE, H  $\frac{1}{2}$ ;  
Cygnus, or the Swan NW, H  $\frac{1}{2}$ ; The Square  
of Pegasus WbS, H  $\frac{1}{2}$ ; Perseus Z.

The two brightest planets, Jupiter and  
Venus, will be situated close to each other  
in the beginning of this year: they will be  
visible just before sunrise, and will present  
a very beautiful appearance.

The opposition of Saturn happens on the  
21st of this month at about 3 o'Clock, A.M.

15th. 4h. 40' S; Aldebaran S, H  $\frac{1}{2}$ ;  
Orion Sbe, H  $\frac{1}{2}$ ; Hydra ESE, H  $\frac{1}{2}$ ;  
Regulus, or the Lion's Heart E, H  $\frac{1}{2}$ .

The sun enters the sign ♒ (Aquarius)  
at 44m. after 5 in the morning of the 20th.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	8	m 3	9	3	a 36	17	10	a 19	25	3	m 32
2	8	55	10	4	29	18	11	8	26	4	15
3	9	50	11	5	19	19	11	55	27	4	59
4	10	49	12	6	10	20	...	...	28	5	45
5	11	48	13	7	0	21	0	m 41	29	6	34
6	0	a 49	14	7	50	22	1	25	30	7	26
7	1	46	15	8	40	23	2	8	31	8	21
8	2	42	16	9	30	24	2	50			

## USEFUL REMARKS.

Aphorisms are not strictly necessary in an Al-  
manac, which has especial relation to the courses  
of the seasons, and to other matters of temporary  
interest; but in a book which every body consults,  
an expressive sentence, accidentally striking the at-  
tention, may suggest a virtuous resolve or divert from  
a mediated error. These useful remarks are texts  
for each man to enlarge upon in his own thoughts.

There will be several occultations of the star Aldebaran by the Moon in the course of this year: as  
this is a star of the first magnitude, these occultations will create an interest in the astronomical world.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 TH	<i>Circumcision</i> . . . . .	Irish Union 1801	<i>Barometer.</i> Ins.
2 F	. . . . .	Edmund Burke b. 1730	Mean height . . . . . 29.921
3 S	. . . . .	Impeachment of the 5 Members, 1641	Highest . . . . . 30.770
4 S	2 Sunday after Christmas	Roger Ascham d. 1568	Lowest . . . . . 28.890
5 M	. . . . .	Duke of York d. 1827	<i>Hygrometer.</i> o
6 Tu	<i>Epiphany</i> . . . . .	. . . . .	Mean dew point . . . . . 34.3
7 W	. . . . .	. . . . .	Highest . . . . . 50
8 Th	. . . . .	Galileo d. 1642	Lowest . . . . . 10
9 F	. . . . .	. . . . .	Mean dryness . . . . . 1.8
10 S	. . . . .	Archb. Laud behd. 1644	Mean greatest do. of day . . . . . 3.5
11 S	1 Sun. af. Epiph. . . . .	Linnæus d. 1773	Greatest dryness . . . . . 19
12 M	. . . . .	Sir Hans Sloane d. 1753	<i>Thermometer.</i>
13 Tu	Hilary. Cam. Term begins	. . . . .	Mean temperature . . . . . 36.1
14 W	Oxford Term begins . . . . .	Chas. Jas. Fox b. 1749	Highest . . . . . 52
15 Th	. . . . .	Edm. Halley d. 1741	Lowest . . . . . 11
16 F	. . . . .	Cicero (M.T.) 107 B.C.	<i>Radiation.</i>
17 S	. . . . .	Battle of Corunna. Sir J. Moore killed 1809.	Mean greatest power of sun . . . . . 4.4
18 S	2 Sunday after Epiphany	Franklin b. 1706	Greatest power . . . . . 12
19 M	. . . . .	Montesquieu b. 1689	Mean cold of terrestrial ra- diation . . . . . 3.5
20 Tu	In 8 d. of St. Hil. 1 ret. . . . .	Wm. Congreve d. 1793	Greatest do. . . . . 10
21 W	. . . . .	Australia coloniz. 1788	Ins.
22 Th	. . . . .	John Howard d. 1790	Mean quantity of rain . . . . . 1.483
23 F	Hilary Term begins . . . . .	Lewis XVI. guillo. 1793	Mean of evaporation . . . . . 0.413
24 S	. . . . .	Lord Bacon b. 1561	<i>Table of the Winds.</i>
25 S	. . . . . [St. Paul]	Rt. Hon. W. Pitt d. 1806	Days Dew-P. Days Dew-P.
26 M	3 S. af. Ep. Conver. of . . . . .	Fred. the Great b. 1712	N. . . . . 34 31° 5' S. . . . . 13 39
27 Tu	In 15 d. of St. Hil. 2 ret. . . . .	Robert Boyle b. 1627	N.E. 4 27.5 S.W. 6 42.5
28 W	. . . . . [D. of Sus. b.]	Robert Burns b. 1759	E. . . . . 13 23.5 W. 6 37
29 Th	K. Geo. IV. Access. 1820	Bonaparte. esc. Elba 1815	S.E. 2 34.5 N.W. 4 32
30 F	K. Charles I. Mart. . . . .	Dr. Jenner d. 1823	In the natural division of the seasons, this is the second month of the Winter quarter; and up- on an average of years, the cold- est of the year.
31 S	K. George IV. Procl. 1820	Mozart b. 1756	The mean of the 24 h. upon a long average of years, does not fall below the freezing point. Continued frost is consequently always an exception to the ge- neral rule of the climate.
		Peter the Great d. 1725	The mean temp. of London is about 2° higher than that of the surrounding country; the differ- ence exists chiefly in the night, & is greatest in Winter & least in Spring. The majority of nights in this month are frosty.
		George III. d. 1820	
		Charles I. behead. 1648	
		Sir Ashton Lever d. 1788	

## EQUATION OF TIME.

D. of M.	Clock of before Sun.	D. of M.	Clock of before Sun.	D. of M.	Clock of before Sun.	D. of M.	Clock of before Sun.
1	3 <sup>57</sup>	8	7 <sup>7</sup>	16	10 <sup>11</sup>	24	12 <sup>30</sup>
2	4 <sup>25</sup>	9	7 <sup>32</sup>	17	10 <sup>31</sup>	25	12 <sup>43</sup>
3	4 <sup>53</sup>	10	7 <sup>57</sup>	18	10 <sup>50</sup>	26	12 <sup>57</sup>
4	5 <sup>21</sup>	11	8 <sup>21</sup>	19	11 <sup>8</sup>	27	13 <sup>9</sup>
5	5 <sup>48</sup>	12	8 <sup>44</sup>	20	11 <sup>26</sup>	28	13 <sup>20</sup>
6	6 <sup>15</sup>	13	9 <sup>7</sup>	21	11 <sup>43</sup>	29	13 <sup>31</sup>
7	6 <sup>41</sup>	14	9 <sup>29</sup>	22	11 <sup>59</sup>	30	13 <sup>41</sup>
		15	9 <sup>50</sup>	23	12 <sup>15</sup>	31	13 <sup>50</sup>

## THE MOON'S CHANGES.

New..... 5th day, 3h. 52m. aftern.  
 First Quart. 12th day, 7h. 18m. morn.  
 Full ..... 20th day, 0h. 17m. morn.  
 Last Quart. 28th day, 5h. 21m. morn.

M. D.	Length of Day.	Day's increase.	Day breaks.	Twilight ends.
1	7 50	0 6	5 59	6 1
6	7 53	0 14	5 57	6 3
11	8 6	0 22	5 54	6 6
16	8 18	0 34	5 49	6 11
21	8 32	0 48	5 44	6 16
26	8 46	1 2	5 38	6 22

Day of the Month.	Duration of Light.							Garden Plants in Flower	Duration of Light.											Days of D's Age.	High Water at London.		Day of the Month.	
	MORNING.								EVENING.												Morn-ing.	After-noon.		
	Moon's duration.								Moon's duration.															
	o'Clock.								o'Clock.															
	1	2	3	4	5	6	7	Sun Rises		Sun Sets	5	6	7	8	9	10	11		h. m.	h. m.				
1								h m	Yellow Hellebore ( <i>Helleborus hibernicus</i> )	h m								25	11 14	11 53	1			
2								8 5	White Coltsfoot ( <i>Tussilago alba</i> )	3 55								26	—	0 26	2			
3								8 4	Double Daisy ( <i>Helictis perennis plena</i> )	3 56								27	0 53	1 27	3			
4								8 3		3 57								28	1 53	2 18	4			
5								8 3		3 57								29	2 41	2 55	5			
6								8 2		3 58								1	3 24	3 44	6			
7								8 1		3 59								2	4 3	4 22	7			
8								8 0		4 0								3	4 41	5 0	8			
9								7 59		4 1								4	5 19	5 39	9			
10								7 58		4 2								5	6 1	6 24	10			
11								7 57		4 3								6	6 47	7 13	11			
12								7 57	Common Laurel ( <i>Prunus laurocerasus</i> )	4 3								7	7 43	8 15	12			
13								7 55	Garden Anemone ( <i>Anemone hortensis</i> )	4 5								8	8 52	9 32	13			
14								7 54	St. Fabian's Nettle ( <i>Lamium garganicum</i> )	4 6								9	10 14	10 53	14			
15								7 53	Black Hellebore ( <i>Helleborus niger</i> )	4 7								10	11 30	—	15			
16								7 52		4 8								11	0 4	0 32	16			
17								7 51		4 9								12	0 53	1 22	17			
18								7 50		4 10								13	1 43	2 4	18			
19								7 48		4 12								14	2 23	2 42	19			
20								7 47		4 13								15	3 0	3 18	20			
21								7 46		4 14								16	3 36	3 52	21			
22								7 44		4 16								17	4 9	4 26	22			
23								7 43		4 17								18	4 41	4 57	23			
24								7 41		4 19								19	5 14	5 31	24			
25								7 40		4 20								20	5 47	6 4	25			
26								7 38		4 22								21	6 23	6 43	26			
27								7 37		4 23								22	7 2	7 25	27			
28								7 35		4 25								23	7 49	8 19	28			
29								7 34		4 26								24	8 54	9 32	29			
30								7 32		4 28								25	10 14	11 0	30			
31								7 30		4 30								26	11 43	—	31			
								7 29	Perdan Flag ( <i>Iris perlica</i> )	4 31														
									Aurustinus ( <i>Viburnum Tinus</i> )															
									Bearsfoot ( <i>Helleborus foetidus</i> )															
									Portugal Laurel ( <i>Prunus lusitanica</i> )															

Seasons for Marketing—Young housekeepers, and other inexperienced persons, sometimes incur unnecessary expense, and give themselves and others trouble, by ordering articles of food, particularly vegetables, when they are scarce and dear. In this division of each month we shew the earliest natural growth, and the continuance of esculent vegetables.

Vegetables—Borcole or Scotch Kale, Broccoli, Cardoons, Celery, Leeks, Parsnips.

POSITION OF THE PRINCIPAL  
PLANETS, &c.1st. 5h. 48' S; Sirius ShE, H  $\frac{1}{2}$ ; Hydra  
SEbE, H  $\frac{1}{2}$ ; Aries WhS, H  $\frac{1}{2}$ .15th. 6h. 43' S; Andromeda WNW,  
H  $\frac{1}{2}$ .The sun enters the sign  $\times$  (Pisces) at  
24m. after 8 in the evening of the 18th.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	9	m19	8	3	a58	15	9	a49	22	2	m12
2	10	19	9	4	50	16	10	35	23	2	56
3	11	19	10	5	41	17	11	20	24	3	41
4	0	a18	11	6	32	18	....	25	4	28	
5	1	15	12	7	23	19	0	m4	26	5	18
6	2	11	13	8	13	20	0	47	27	6	11
7	3	5	14	9	2	21	1	29	28	7	6

## USEFUL REMARKS.

The advantage of living does not consist  
in length of days, but in the right improve-  
ment of them.—*Montaigne*.

See the little day-star moving.

Life and time are worth improving,

Seize the moments while they stay;

Seize and use them,

Least you lose them,

And lament the wasted day.—*Watts*.

Forget not in thy youth to be mindful of  
thy end; for though the old man cannot  
live long, yet the young man may die  
quickly.—*Lord Burleigh*.

As length of life is denied to us, we  
should at least do something to show that  
we have lived.—*Cicero*.

He who postpones the hour of living  
rightly, is like the rustic who waited till the  
river should have flowed past him.—*Horace*.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 S	4 S. af. Ep. Sal. Fish. beg.		<i>Barometer.</i> Ins.
2 M	Pu. of B. V. Mary. <sup>[in Scot.]</sup>		Mean height . . . . . 30.067
3 Tu	On Mor. of Purif. 3 ret.		Highest . . . . . 30.820
4 W			Lowest . . . . . 29.170
5 Th			<i>Hygrometer.</i>
6 F		Galvani d. 1799	Mean dew point . . . . . 34.9
7 S		Dr. Priestley d. 1804	Highest . . . . . 49.
8 S	5 Sun. after Epiphany {		Lowest . . . . . 20
9 M	In 8 days of Purif. 4 ret.	Samuel Butler b. 1612	Mean dryness . . . . . 3.1
10 Tu		M. Q. Scots behd. 1586	Mean greatest do. of day 6.1
11 W		Dr. Maskelyne d. 1811	Greatest dryness . . . . . 20
12 Th		Ld. Daruley mur. 1567	<i>Thermometer.</i>
13 F		Bp. Hoadley b. 1706	Mean temperature . . . . . 38
14 S	Valentine . . . . . {	Voltaire b. 1694	Highest . . . . . 53
15 S	Septuages. Sunday . . . . . {	Adm. Jervis's vict. 1797	Lowest . . . . . 21
16 M		Bp. Atterbury d. 1732	<i>Radiation.</i>
17 Tu		P. Melancthon b. 1495	Mean greatest power of sun 10.1
18 W		Mich. Angelo d. 1563	Greatest power . . . . . 36
19 Th		Molière d. 1673	Mean cold of terrestrial ra- diation . . . . . 4.7
20 F		Martin Luther d. 1546	Greatest do. . . . . 10
21 S		Copernicus b. 1473	Ins.
22 S	Sexagesima Sunday . . . . . {	Dav. Garrick b. 1716	Mean quantity of rain . . 0.746
23 M		Duke of Suffolk be- headed 1554	Mean of evaporation . . 0.73
24 Tu	St. Matthias. D. of Cam. b.	James Barry d. 1806	<i>Table of the Winds.</i>
25 W	Camb. Term div. m. . . . .	Dr. Rd. Price b. 1723	Days Dew-P. Days Dew-P.
26 Th		G. F. Handel b. 1684	N. 1 30. S. 2 37.5
27 F	Hare-hunting ends . . . . .	E. of Essex behd. 1601	N.E. 4 29. S.W. 5 39.5
28 S		Jn. P. Kemble d. 1823	E. 2 32. W. 5 39.
		John Evelyn d. 1706	S.E. 2 34.5 N.W. 3 34.

The average of nights in this  
month of which the air is frosty,  
does not exceed eleven. An  
abundance of hoar frost is a well  
known indication of rain. Great  
frosts are commonly preceded by  
continued thick mists, arising  
from the condensation of the  
vapour emitted by the rivers  
and other waters.

Snow, when slowly produced,  
will often be found crystallized  
in the most beautiful forms.

## EQUATION OF TIME.

## THE MOON'S CHANGES.

New,..... 4th day, 2h. 31m. morn.  
 First Quart. 10th day, 7h. 23m. night.  
 Full,..... 18th day, 7h. 15m. night.  
 Last Quart. 26th day, 7h. 20m. night.

D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	M. Length D. of Day.	Day's increase.	Day breaks.	Twilight ends.
1 13' 58"	8 14' 34"	15 14' 29"	22 13' 49"	1 9 6	1 22	5 30	6 31
2 14 6	9 14 36	16 14 26	23 13 41	6 9 23	1 39	5 23	6 38
3 14 13	10 14 37	17 14 21	24 13 32	11 9 41	1 57	5 15	6 46
4 14 19	11 14 37	18 14 16	25 13 22	16 10 1	2 17	5 6	6 55
5 14 24	12 14 36	19 14 10	26 13 12	21 10 19	2 35	4 57	7 4
6 14 28	13 14 35	20 14 4	27 13 1	26 10 39	2 53	4 48	7 13
7 14 31	14 14 32	21 13 57	28 12 50				

Day of the Month	Duration of Light.						G. P. in F.	Duration of Light.						Days of D's Age.	High Water at London.		Day of the Month.
	MORNING.							EVENING.									
	Moon's duration.							Moon's duration.									
	o'Clock. 1 2 3 4 5 6							o'Clock. 6 7 8 9 10 11									
							Sun Rises.		Sun Sets.						Morn- ing.	After- noon.	
							h m		h m						h m	h m	
1							7 27	Polyanthus ( <i>Primula elatior</i> )	4 33					27	0 23	0 57	1
2							7 25	Yellow Crocus ( <i>Crocus maritimus</i> )	4 35					28	1 28	1 56	2
3							7 24	Peach Tree ( <i>Amygdalus Perseica</i> )	4 36					29	2 20	2 44	3
4							7 22	Periwinkle ( <i>Vinca minor</i> )	4 38					30	3 4	3 25	4
5							7 21		4 40				1	3 43	4 2	5	
6							7 19		4 42				2	4 20	4 39	6	
7							7 17		4 44				3	4 57	5 17	7	
8							7 15		4 46				4	5 38	6 0	8	
9							7 13		4 48				5	6 22	6 45	9	
10							7 12		4 49				6	7 11	7 40	10	
11							7 10		4 51				7	8 13	8 49	11	
12							7 8		4 53				8	9 28	10 10	12	
13							7 6		4 55				9	10 49	11 26	13	
14							7 4		4 57				10	11 59	—	14	
15							7 2		4 59				11	0 26	0 52	15	
16							7 0		5 1				12	1 14	1 35	16	
17							6 59		5 2				13	1 55	2 14	17	
18							6 57		5 4				14	2 32	2 50	18	
19							6 55		5 6				15	3 8	3 24	19	
20							6 53		5 8				16	3 40	3 56	20	
21							6 51		5 10				17	4 12	4 29	21	
22							6 49		5 12				18	4 44	5 0	22	
23							6 47		5 14				19	5 18	5 37	23	
24							6 45		5 16				20	5 53	6 14	24	
25							6 43		5 18				21	6 33	6 54	25	
26							6 41		5 20				22	7 17	7 44	26	
27							6 39		5 22				23	8 17	8 58	27	
28							6 37		5 24				24	9 42	10 31	28	

Vegetables—Brocoli, Leeks, Parsley, (and through the year) Parsnips.

Meat—Mutton is best from Christmas to Midsummer.

Poultry—Chickens and Ducklings are now to be purchased at high prices They are best when they are cheapest.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 7h. 38' S; Cassiopeia NWbN, H  $\frac{1}{2}$ ;  
 Procyon S, H  $\frac{1}{2}$ ; Alpha Hydræ SSE, H  $\frac{1}{2}$ ;  
 Saturn SbE, H  $\frac{1}{4}$ .  
 15th. 8h. 33' S; Taurus WbS, H  $\frac{1}{2}$ ;  
 Orion SWbW, H  $\frac{1}{4}$ .

The sun enters the sign ♈ (Aries) at  
 37m. after 8 in the evening of the 20th.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	8	m 3	9	2	a 35	17	10	a 8	25	3	m 22
2	9	1	10	4	29	18	10	51	26	4	13
3	10	0	11	5	21	19	11	34	27	5	6
4	10	53	12	6	13	20	....	28	6	1	
5	11	55	13	7	3	21	0	m 17	29	6	57
6	0	a 51	14	7	51	22	1	1	30	7	53
7	1	47	15	8	38	23	1	46	31	8	50
8	2	41	16	9	23	24	2	33			

## USEFUL REMARKS.

No trees bear fruit in autumn unless they blossom in the spring.

An uncultivated mind, like unmanured ground, will soon be overrun with weeds.

Education and instruction are the means, the one by use, the other by precept, to make our natural faculty of reason both the better and the sooner to judge rightly between truth & error, good & evil.—*Hooker.*

Give us seed unto our heart, and culture to our understanding, that there may come fruit of it.—*2 Esdras.*

One of the greatest objects of education is, that children, as is expressed in the Church Catechism, should learn and labour truly to get their own living, and do their duty in that state of life, unto which it shall please God to call them.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 <i>S</i>	Quinquagesima Sun. David		<i>Barometer.</i> Ins. Mean height . . . . . 29.843 Highest . . . . . 30.770 Lowest . . . . . 28.870
2 <i>M</i>		N. Boileau <i>d.</i> 1711	<i>Hygrometer.</i> Mean dew point . . . . . 39 Highest . . . . . 58 Lowest . . . . . 19
3 <i>Tu</i>	Shrove Tuesday . . . . .	John Wesley <i>d.</i> 1791	Mean dryness . . . . . 4.9 Mean greatest do. of day . . . . . 9.6 Greatest dryness . . . . . 23
4 <i>W</i>	Ash Wednesday . . . . .	Edm. Waller <i>b.</i> 1605	<i>Thermometer.</i> Mean temperature . . . . . 43.9 Highest . . . . . 66 Lowest . . . . . 24
5 <i>Th</i>		John Ld. Somers <i>b.</i> 1650	<i>Radiation.</i> Mean greatest power of sun . . . . . 16 Greatest power . . . . . 49 Mean cold of terrestrial radiation . . . . . 5.5 Greatest do. . . . . 10
6 <i>F</i>		Dr. Arne <i>d.</i> 1778	Ins. Mean quantity of rain . . . . . 1.440 Mean of evaporation . . . . . 1.488
7 <i>S</i>		Michael Angelo <i>b.</i> 1474	<i>Table of the Winds.</i> Days, Dew P.   Days, Dew-P. N. 2 $\frac{1}{2}$ 310.5   S. 2 $\frac{1}{2}$ 47 N.E. 4 31   S.W. 9 $\frac{1}{2}$ 44.5 E. — —   W. 6 $\frac{1}{2}$ 42 S.E. 2 35   N.W. 4 $\frac{1}{2}$ 35
8 <i>S</i>	1 Sund. in Lent . . . . .	F. Guicciardini <i>b.</i> 1482	The temperature of this month advances 6°, while the dew point rises only 4; occasioning that degree of dryness which is so important to the husbandman for preparing the soil for the reception of the different seeds.
9 <i>M</i>		D. of Bridgwater <i>d.</i> 1803	The increase of temperature is chiefly during the day; and takes place by sudden starts, and not by a steady increase from day to day.
10 <i>Tu</i>		Dd. Rizzio assass. 1566	Showers and hail are common, attended in some instances by frosty nights. Storms of wind may be expected about the Equinox, and are distinguished from the Equinoctial gales of autumn by their greater dryness.
11 <i>W</i>	Ember Week . . . . .	Sir H. Myddelton <i>d.</i> 1539	
12 <i>Th</i>		Torquato Tasso <i>b.</i> 1514	
13 <i>F</i>		Dr. Priestley <i>b.</i> 1733	
14 <i>S</i>		Adm. Byng shot 1757	
15 <i>S</i>	2 Sunday in Lent . . . . .	Julius Cæsar assassinated b.c. 44	
16 <i>M</i>		King of Swe. ass. 1792	
17 <i>Tu</i>			
18 <i>W</i>		Sir Rt. Walpole <i>d.</i> 1745	
19 <i>Th</i>		Jn. Horne Tooke <i>d.</i> 1812	
20 <i>F</i>		Sir Is. Newton <i>d.</i> 1727	
21 <i>S</i>		Bat. of Alexandria 1801	
22 <i>S</i>	3 Sunday in Lent . . . . .	Porto Bello taken 1740	
23 <i>M</i>			
24 <i>Tu</i>		Queen Elizabeth <i>d.</i> 1603	
25 <i>W</i>	LADY DAY. Annunc. { [B. V. Mary]	London Charity Schools instituted 1688	
26 <i>Th</i>			
27 <i>F</i>		James I. <i>d.</i> 1625	
28 <i>S</i>		Raffaëlle <i>b.</i> 1483	
29 <i>S</i>		Abercrombie <i>d.</i> 1801	
30 <i>M</i>	4 S. in Lent. Midlent Sun.		
31 <i>T</i>		Sicilian Vespers 1282 Descartes <i>b.</i> 1596 Joseph Haydn <i>b.</i> 1732	



1829]

MARCH, XXXI DAYS.

[1829.

## EQUATION OF TIME.

## THE MOON'S CHANGES.

New..... 5th day, 0h. 36m. aftern.  
 First Quart. 12th day, 9h. 49m. morn.  
 Full ..... 20th day, 1h. 51m. aftern.  
 Last Quar.. 28th day, 7h. 19m. morn.

D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	M.	Length of Day.	Day's increase.	Day breaks.	Twilight ends.
1 12 39"	8 11' 4"	16 8' 53"	24 6' 27"	1	10 51	3 7	4 43	7 18
2 12 26	9 10 49	17 8 35	25 6 9	2	11 11	3 27	4 32	7 29
3 12 14	10 10 33	18 8 17	26 5 50	3	11 29	3 45	4 21	7 40
4 12 1	11 10 17	19 7 59	27 5 31	4	12 9	4 5	4 11	7 50
5 11 47	12 10 1	20 7 41	28 5 13	5	12 29	4 45	4 0	8 1
6 11 33	13 9 44	21 7 23	29 4 54	6	12 29	4 45	3 48	8 13
7 11 19	14 9 27	22 7 4	30 4 36	7	12 29	4 45	3 48	8 13
	15 9 10	23 6 46	31 4 18	8				

Day of the Month.	Duration of Light.					Garden Plants in Flower.	Duration of Light.					Days of D's Age.	High Water at London.		Day of the Month.		
	MORNING.						EVENING.						Morn- ing.	After- noon.			
	Moon's duration	Sun	Rises.	Sets.	Moon's duration		Sun	Rises.	Sets.	Moon's duration	Sun					Rises.	Sets.
1																1	
2																2	
3																3	
4																4	
5																5	
6																6	
7																7	
8																8	
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14																14	
15																15	
16																16	
17																17	
18																18	
19																19	
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21																21	
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23																23	
24																24	
25																25	
26																26	
27																27	
28																28	
29																29	
30																30	
31																31	

Vegetables—Brocoli, Parsnips, Radishes, Small Salad, (and through the year) Sea Kale, Spinach,  
 (Spring)

Meat—Veal is best from March to July.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 9h. 40' S; Regulus S, H  $\frac{1}{2}$ ; Arcturus EbS, H  $\frac{1}{2}$ ; Alpha Coronæ Borealis EbN, H  $\frac{1}{2}$ ; Gamma Draconis NEbN, H  $\frac{1}{2}$ .

15th. 10h. 36' S; Ursa Major N, H Z.

The sun enters the sign 8 (Taurus) at 7m. after 9 in the morning of the 20th.

## SOUTHING OF THE MOON.

D. h m	D. h m	D. h m	D. h m
1 9m46	9 5 a 3	17 11 a 6	25 4 m59
2 10 42	10 5 54	18 11 51	26 5 54
3 11 37	11 6 42	19 . . . .	27 6 49
4 0 a 32	12 7 28	20 0 m37	28 7 43
5 1 28	13 8 13	21 1 26	29 8 37
6 2 24	14 8 56	22 2 17	30 9 30
7 3 18	15 9 39	23 3 10	
8 4 11	16 10 22	24 4 4	

## USEFUL REMARKS.

If you can be well without health, you may be happy without virtue.

He that sows iniquity shall reap sorrow.

Our physical well-being, our moral worth, our social happiness, our political tranquillity, all depend on that controul of all our appetites and passions which the ancients designed by the cardinal virtue of temperance.—*Burke*.

He who lies under the dominion of any one vice must expect the common effects of it: if lazy, to be poor; if intemperate, to be diseased; if luxurious, to die betimes.

Doing good is the only certainly happy action of a man's life.—*Sir P. Sidney*.

Solomon uses the word *fool* as a term of the same signification with unjust, and makes all deviation from goodness to come under the notion of folly.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 W	. . . . .	Ovid (Pub.) <i>b.</i> 43 B.C.	<i>Barometer.</i> Ins.
2 Th	. . . . .	Bat. of the Baltic 1801	Mean height . . . . . 29.881
3 F	. . . . .	Wm. Harvey <i>b.</i> 1578	Highest . . . . . 30.540
4 S	. . . . .	Oliv. Goldsmith <i>d.</i> 1774	Lowest . . . . . 29.200
5 S	5 Sunday in Lent . .	Thos. Hobbes <i>b.</i> 1588	<i>Hygrometer.</i>
6 M	. . . . .	First abdication of Bonaparte 1814	Mean dew point . . . . . 43.5
7 Tu	. . . . .	Dr. H. Blair <i>b.</i> 1718	Highest . . . . . 58
8 W	. . . . .	. . . . .	Lowest . . . . . 27
9 Th	. . . . .	John Opie <i>d.</i> 1807	Mean dryness . . . . . 6.4
10 F	Cambridge Term ends .	Wm. Cheselden <i>d.</i> 1752	Mean greatest do. of day 12.8
11 S	Oxford Term ends . .	Geo. Canning <i>b.</i> 1770	Greatest dryness . . . . . 26
12 S	6 S. in Lent. Palm S. .	Dr. Young <i>d.</i> 1765	<i>Thermometer.</i>
13 M	. . . . .	Ad. Rodney's vic. 1732	Mean temperature . . . . . 49.9
14 Tu	. . . . .	G. F. Handel <i>d.</i> 1759	Highest . . . . . 74
15 W	. . . . .	. . . . .	Lowest . . . . . 29
16 Th	. . . . .	Arthur Young <i>d.</i> 1820	<i>Radiation.</i>
17 F	Good Friday . . . .	Benj. Franklin <i>d.</i> 1790	Mean greatest power of sun 28.1
18 S	. . . . .	Earl Camden <i>d.</i> 1794	Greatest power . . . . . 47
19 S	Easter Day. . . . .	Lord Byron <i>d.</i> 1824	Mean cold of terrestrial radiation . . . . . 6.2
20 M	Easter Monday . . .	Span. Fleet dest. 1657	Greatest do. . . . . 14
21 Tu	Easter Tuesday . . .	. . . . .	Ins.
22 W	. . . . .	Hen. Fielding <i>b.</i> 1707	Mean quantity of rain . . 1.786
23 Th	St. Geo. K. Geo. b. d. h. .	Shakspeare <i>b.</i> 1564	Mean of evaporation . . . 2.990
24 F	. . . . .	Lord Anson <i>b.</i> 1697	<i>Table of the Winds.</i>
25 S	St. Mark. Ds. of Glou. bn.	O. Cromwell <i>b.</i> 1599	Days. Dew-Point.
26 S	1 S. af. Easter. Low S. .	Wm. Cowper <i>d.</i> 1800	N. . 2½ . . . . . 40.
27 M	. . . . .	Lord Somers <i>d.</i> 1716	N.E. 3½ . . . . . 40.5
28 Tu	. . . . .	David Hume <i>b.</i> 1711	E. 3 . . . . . 45.
29 W	Oxf. & Camb. Terms beg.	Sir W. Jones <i>d.</i> 1794	S.E. 3½ . . . . . 49.
30 Th	. . . . .	First Stone of London University laid, 1827	S. 2½ . . . . . 47.
			S.W. 4 . . . . . 45.
			W. 5½ . . . . . 44.
			N.W. 5½ . . . . . 42.
			MR. HOWARD is of opinion, from a careful comparison of a long series of observations, that a wet spring is an indication of a dry time for the ensuing harvest; there are upon an average six frosty nights in this month.
			The greatest depression of temperature in every month happens, all other circumstances being the same, a short time before sun rise.



1829]

MAY—FIFTH MONTH.

[1829.

## POSITION of the PRINCIPAL PLANETS, &amp;c.

1st. 11h. 38' S; Spica Virginis SSE,  
H  $\frac{1}{2}$ ; Libra SE, H  $\frac{1}{2}$ ; Hercules E, H  $\frac{1}{2}$ ;  
Alpha Lyra NEbN, H  $\frac{1}{2}$ ; Cepheus NEbE, H  $\frac{1}{2}$ .  
15th. 12h. 34' S; Draco NEbN, H  $\frac{1}{2}$ ;  
Capella and the constellation Auriga NW,  
H  $\frac{1}{2}$ ; Serpens SEbE, H  $\frac{1}{2}$ .

The sun enters the sign  $\Pi$  (Gemini) at  
31m. after 9 in the morning of the 21st.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	10	m24	9	5	a26	17	11	a23	25	5	m40
2	11	18	10	6	12	18	...	...	26	6	33
3	0	a13	11	6	56	19	0	m13	27	7	25
4	1	8	12	7	39	20	1	6	23	8	17
5	2	3	13	8	21	21	2	1	29	9	9
6	2	57	14	9	4	22	2	56	30	10	2
7	3	49	15	9	49	23	3	52	31	10	55
8	4	39	16	10	35	24	4	4	...	...	...

## USEFUL REMARKS.

The virtue of prosperity is temperance;  
the virtue of adversity is fortitude.—*Lord Bacon.*

A wise man wants but little, because he  
desires not much.—*Sir P. Sidney.*

Diogenes walked on a day with his  
friend to see a country fair: where he saw  
ribbons and looking glasses, and many other  
gimcracks:—and he said to his friend,  
“How many things are there in this world  
of which Diogenes has no need!”—*Izaak Walton.*

Better is the life of a poor man in a mean  
cottage than delicate fare in another man's  
house.—*Ecclesiasticus.*

There are as many miseries beyond  
riches as on this side them.

Poverty wants *some*, luxury *many*, ava-  
rice *all* things.—*Cowley.*

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 F	St. Philip and St. James	Union with Scot. 1707	Barometer. Ins.
2 S	...	Joseph Addison b. 1672	Mean height . . . . . 29.898
3 S	2 Sunday after Easter	Battle of Lutzen 1813	Highest . . . . . 30.390
4 M	From Easter in 15 d. 1 ret.	Massac. at Madrid 1808	Lowest . . . . . 29.160
5 Tu	...	Nic. Machiavelli b. 1469	Hygrometer.
6 W	Easter Term begins	Seringapatam tak. 1799	Mean dew point . . . . . 46
7 Th	...	Napoleon Bonaparte	Highest . . . . . 62
8 F	...	d. 1821	Lowest . . . . . 28
9 S	...	Battle of Prague 1757	Mean dryness . . . . . 7.9
10 S	3 Sunday after Easter	M. Antoninus 121 a.c.	Mean greatest do. of day 15.6
11 M	From East. in 3 w. 2 ret.	Edward Gibbon b. 1737	Greatest dryness . . . . . 24
12 Tu	...	Bishop Porteus b. 1731	Thermometer.
13 W	...	Columbus' 4th Vo. 1501	Mean temperature . . . . . 54
14 Th	...	Battle of Lodi 1796	Highest . . . . . 70
15 F	...	E. of Chatham d. 1778	Lowest . . . . . 33
16 S	...	Spencer Perceval as- sassinated 1812	Radiation.
17 S	4 Sunday after Easter	Henry IV. of France	Mean greatest power of sun 30.5
18 M	From East in 1 mo. 3 ret.	assassinated 1610	Greatest power . . . . . 57
19 Tu	...	Card. Alberoni b. 1664	Mean cold of terrestrial ra- diation . . . . . 4.2
20 W	...	Battle of Albuera 1810	Greatest do. . . . . 13
21 Th	...	Radcliffe Library, Ox- ford, founded 1737	Ins.
22 F	Pss. Homburg born	Bonaparte decl. Empe- ror of the French 1804	Mean quantity of rain . 1.853
23 S	...	Anne Boleyn behd. 1536	Mean of evaporation . 3.286
24 S	5 S. aft. E. Rogation S.	Charles Bonnet d. 1793	Table of the Winds.
25 M	From East. in 5 wks. 4 ret.	Alexander Pope b. 1688	Days Dew-P. Days Dew-P.
26 Tu	...	Battle of Ramillies 1706	N. . . 3 42° S. . . 1 54
27 W	...	Linnæus b. 1707	N.E. 4 40.5 S.W. 6 49.5
28 Tu	Ascen. D. Holy Thursday	Wm. Emerson d. 1782	E. . . 4 45.5 W. . . 5 46.5
29 F	On Mor. of Asc. 5 ret. K.	Dante b. 1265	S.E. 4 50.5 N.W. 3 41
30 S	[Charles II. restored]	William Pitt b. 1759	The temperature of the air still
31 S	Sunday after Ascension D.	Columbus d. 1506	outstrips the advance of the va- pour, and the atmosphere at- tains very nearly its greatest dryness. Genial showers, how- ever, are common, and are ge- nerally brought by the south-west winds. They greatly promote the progress of vegetation.

Frosty nights are not uncom-  
mon, and produce great injury  
to the fruit blossoms. There are,  
in fact, only two months, namely  
July and August, in which, tak-  
ing into consideration the power  
of radiation, vegetation, in cer-  
tain situations, is not exposed to  
a temperature of 32°.

[1829]

MAY, XXXI DAYS.

[1829.]

## EQUATION OF TIME.

D. Clock of after M. Sun.	D. Clock of after M. Sun.	D. Clock of after M. Sun.	D. Clock of after M. Sun.
1 3' 3"	8 3' 43"	16 3' 55"	24 3' 32"
2 3 11	9 3 46	17 3 54	25 3 26
3 3 17	10 3 49	18 3 53	26 3 21
4 3 24	11 3 52	19 3 51	27 3 14
5 3 29	12 3 54	20 3 48	28 3 7
6 3 34	13 3 55	21 3 45	29 3 0
7 3 39	14 3 55	22 3 41	30 2 52
	15 3 56	23 3 37	31 2 44

## THE MOON'S CHANGES.

New	.....	3d day,	7h. 57m. morn.
First Quarter,	..10th day,	7h. 36m. even.	
Full	.....18th day,	7h. 43m. even.	
Last Quarter,	..25th day,	8h. 19m. even.	

M. D.	Length of Day.	Day's increase.	Day breaks.	Twilight ends.
1	14 47	7 3	2 7	9 55
6	15 3	7 19	1 50	10 14
11	15 19	7 35	1 29	10 34
16	15 35	7 51	1 7	10 59
21	15 49	8 5	0 35	11 36
26	16 1	8 17	No real Night.	

Day of the Month.	Duration of Light.					Garden Plants in Flower.	Duration of Light.					Days of D's Age.	High Water at London.			Day of the Month.			
	MORNING.				Sun Rises.		EVENING.				Sun Sets.		Moon's duration.	Days of D's Age.	Morn- ing.		After- noon.		
	Moon's duration.	o'Clock.					Moon's duration.	o'Clock.							Morn- ing.			h m	
		1	2	3				4	8	9								10	11
1						Germander Speedwell ( <i>Veronica Chamædrys</i> ) Thrift ( <i>Statice Armeria</i> ) London Pride, or Nonc-so-Pretty ( <i>Saxifraga umbrosa</i> ) Crimson Geranium ( <i>Geranium sanguineum</i> ) Star of Bethlehem ( <i>Ornithogalum umbellatum</i> ) Rough Comfrey ( <i>Symphytum aspernum</i> ) Alpine Blue Bottle ( <i>Centaurea montana</i> ) Cambrian Poppy ( <i>Papaver cambricum</i> ) Rocket ( <i>Hesperis matronalis inodora</i> )						28	1 35	1 59	1				
2							7 24						29	2 21	2 41	2			
3							7 25						1	3 1	3 18	3			
4							7 27						2	3 38	3 57	4			
5							7 29						3	4 16	4 36	5			
6							7 31						4	4 55	5 17	6			
7							7 32						5	5 36	5 57	7			
8							7 34						6	6 20	6 42	8			
9							7 36						7	7 5	7 31	9			
10							7 37						8	7 56	8 25	10			
11							7 39						9	8 55	9 28	11			
12							7 40						10	10 2	10 34	12			
13							7 42						11	10 6	11 35	13			
14							7 43						12	—	0 3	14			
15							7 45						13	0 28	0 54	15			
16							7 46						14	1 16	1 37	16			
17							7 48						15	1 58	2 13	17			
18							7 49						16	2 37	2 57	18			
19							7 51						17	3 16	3 35	19			
20							7 52						18	3 55	4 15	20			
21							7 54						19	4 34	4 53	21			
22							7 55						20	5 13	5 34	22			
23							7 56						21	5 55	6 18	23			
24							7 58						22	6 42	7 7	24			
25							7 59						23	7 35	8 8	25			
26							8 0						24	8 46	9 30	26			
27							8 1						25	10 14	10 58	27			
28							8 2						26	11 36	—	28			
29							8 3						27	0 13	0 45	29			
30							8 4						28	1 14	1 38	30			
31							8 5						29	2 0	2 20	31			
							8 6						30						
													31						

Vegetables—Asparagus, Cabbage, Carrots, Cauliflowers, Chervil, Corn-Salad, Cucumbers, Lettuce, Pease, Potatoes, (and through the year) Radishes, Sea Kale, Spinach (Spring), Turnips.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 13h. 41' S; Spica Virginis SbW, H 4; Libra SSE, H 4.

The opposition of Jupiter occurs on the 1st of this month, at about 5h. A.M.

15th. 14h. 36' S; Leo WbS, H 4; Coma Berenices SWbW, H 4; Arcturus SbW, H 4.

The sun enters the sign  $\varpi$  (Cancer) at 8m. after 6 in the afternoon of the 21st.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	11	m50	9	6	a14	17	...	...	25	7	m 0
2	0	a44	10	6	56	18	0	m43	26	7	52
3	1	37	11	7	39	19	1	40	27	8	44
4	2	28	12	8	24	20	2	36	28	9	37
5	3	17	13	9	10	21	3	31	29	10	30
6	4	3	14	10	0	22	4	25	30	11	22
7	4	48	15	10	5	23	5	18			
8	5	31	16	11	46	24	6	9			

## USEFUL REMARKS.

Business is the salt of life; which not only gives a grateful smack to it, but dries up those crudities that would offend, preserves from putrefaction, and drives off all those blowing flies that would corrupt it.

Let a man be sure to drive his business, rather than let it drive him. When a man is but once brought to be driven, he becomes a vassal to his affairs.

Reason and right give the quickest despatch. All the entanglements that we meet with arise from the irrationalities of ourselves or others.

With a wise and honest man a business is soon ended; but with a fool and knave there is no conclusion, and seldom even a beginning.

(The preceding sentences are from Owen Feltham's *Resolves*.)

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 M	Easter Term ends . . .	Ld. Howe's vict. 1793	<i>Barometer.</i> Ins.
2 Tu	. . . . .	Peace signed at Paris 1814	Mean height . . . . . 30.020
3 W	. . . . .	Harvey d. 1657	Highest . . . . . 30.460
4 Th	Camb. Term div. n. . .	Hen. Grattan d. 1820	Lowest . . . . . 29.600
5 F	Duke of Cumb. born . .		<i>Hygrometer.</i>
6 S	Oxford Term ends . . .	Corneille b. 1606	Mean dew point . . . . . 50.7
7 S	Whit Sunday . . . . .	Carl von Weber d. 1826	Highest . . . . . 70
8 M	Whit Monday . . . . .	Bp. Warburton d. 1779	Lowest . . . . . 35
9 Tu	Whit Tuesday . . . . .	Const. Huygens d. 1695	Mean dryness . . . . . 8.0
10 W	Ember Week. Oxf. Ter. b.	Edw. Black P. d. 1376	Mean greatest do. of day 16
11 Th	St. Barnabas . . . . .	N. Lond. Br. com. 1824	Greatest dryness . . . . . 25
12 F	. . . . .	Ben. Jonson b. 1574	<i>Thermometer.</i>
13 S	. . . . .	Dr. Robertson d. 1793	Mean temperature . . . . . 58.7
14 S	Trin. Sunday . . . . .	Ld. Hastings behd. 1483	Highest . . . . . 90
15 M	On Mor. of H. Tr. 1 ret. {	Bat. of Marengo 1800	Lowest . . . . . 37
16 Tu	. . . . .	Abolition of the Corps of Janissaries 1826	<i>Radiation.</i>
17 W	. . . . .	J. D. of Marlbro' d. 1722	Mean greatest power of sun 39.9
18 Th	. . . . .	The 7 Bishops acq. 1638	Greatest power . . . . . 65.0
19 F	Trinity Term begins. . .	J. Hampden killed 1643	Mean cold of terrestrial radiation . . . . . 5.2
20 S	. . . . .	Bat. of Waterloo, 1815	Greatest do. . . . . 17.0
21 S	1 Sunday after Trinity	Mag. Chart. sign. 1215	Ins.
22 M	In 8 days of H. Tr. 2 ret.	Peace proclaimed with France 1814	Mean quantity of rain . . 1.830
23 Tu	. . . . .	Bat. of Vittoria 1813	Mean of evaporation. . . 3.760
24 W	MIDSUMMER DAY {	M. Akenside d. 1770	<i>Table of the Winds.</i>
25 Th	[Nat. of St. John Bap. {	Newfoundland discovered 1494	Days, Dew P.   Days, Dew P.
26 F	. . . . .		N. 5 49° 5 S. 1 62°
27 S	. . . . .		N.E. 6 49° 5 S.W. 3 56
28 S	. . . . .		E. 2 56 W. 3 52
29 M	2 Sunday after Trinity		S.E. 4 57 N.W. 5 50.5
30 Tu	St. Peter. In 15 days of H. Tr. 3 ret.		THE energy of the sun's beams is at its maximum, but the temperature of the air does not attain its highest point till the two following months; the dryness of the atmosphere, and the consequent amount of evaporation, are at their height.

The average number of days on which rain falls, is under 12, and is the lowest of any month in the year.

1829]

JUNE, XXX DAYS.

[1829.

## EQUATION OF TIME.

## THE MOON'S CHANGES.

New ..... 1st day, 5h. 49m. aftern.  
 First Quarter, 9th day, 1h. 23m. aftern.  
 Full, ..... 17th day, 6h. 15m. morn.  
 Last Quarter 24th day, 0h. 57m. morn.

D. Clock of after M. Sun.	D. Clock of after M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	M. D.	Length of Day.	Day's increase.	Day breaks.	Twilight ends.
1 2' 35"	8 1' 23"	15 0' 1"	23 1' 43"	1	16 14	8 30		
2 2 26	9 1 12	16 0 13	24 1 53	6	16 22	8 33		
3 2 16	10 1 0	17 0 26	25 2 9	11	16 28	8 44		
4 2 6	11 0 49	18 0 39	26 2 21	16	16 32	8 48		
5 1 56	12 0 37	19 0 51	27 2 34	21	16 34	8 50		
6 1 45	13 0 24	20 1 4	28 2 46	26	16 32	D. dec. 2		
7 1 35	14 0 12	21 1 17	29 2 58					
		22 1 30	30 3 11					

No real Night,  
 but constant  
 Day, or Twilight.

Day of the Month	Duration of Light				Garden Plants in Flower.	Duration of Light				Moon's Age.	High Water at London.		Day of the Month	
	MORNING.					EVENING.					Days of D's Age.	Morn- ing.		After- noon.
	Moon's duration.	Sun	Rises	Sets.		Moon's duration.	Sun	Sets.	Moon's duration.					
1			3 53		American Bindweed ( <i>Convolvulus tricolor</i> ) Nasturtium ( <i>Tropaeolum majus</i> ) Canterbury Bells ( <i>Campanula Medium</i> ) Rose Campion ( <i>Agrostemma coronaria</i> ) Candytuft ( <i>Iberis umbellata</i> ) Foxglove ( <i>Digitalis purpurea</i> ) Marvel of Peru ( <i>Mirabilis Jalapa</i> ) White Lily ( <i>Lilium candidum</i> ) Orange Lily ( <i>Lilium bulbiferum</i> ) Yellow Rose ( <i>Rosa lutea</i> ) Carnation Poppy ( <i>Papaver Rhoeas</i> ) Maiden Pink ( <i>Dianthus deltoides</i> )		8 7			1	2 40	3 1	1	
2			3 52				8 8			2	3 20	3 39	2	
3			3 51				8 9			3	3 59	4 18	3	
4			3 50				8 10			4	4 36	4 55	4	
5			3 49				8 11			5	5 15	5 34	5	
6			3 49				8 11			6	5 52	6 11	6	
7			3 48				8 12			7	6 32	6 52	7	
8			3 47				8 13			8	7 15	7 37	8	
9			3 47				8 13			9	8 1	8 28	9	
10			3 46				8 14			10	8 57	9 28	10	
11			3 46				8 14			11	10 1	10 35	11	
12			3 45				8 15			12	11 10	11 41	12	
13			3 45				8 15			13	—	0 11	13	
14			3 44				8 16			14	0 39	1 6	14	
15			3 44				8 16			15	1 29	1 53	15	
16			3 44				8 16			16	2 16	2 37	16	
17			3 44				8 16			17	2 57	3 20	17	
18			3 43				8 17			18	3 40	3 59	18	
19			3 43				8 17			19	4 19	4 33	19	
20			3 43				8 17			20	4 57	5 17	20	
21			3 43				8 17			21	5 37	5 53	21	
22			3 43				8 17			22	6 20	6 44	22	
23			3 43				8 17			23	7 10	7 39	23	
24			3 43				8 17			24	8 12	8 50	24	
25			3 43				8 17			25	9 31	10 15	25	
26			3 44				8 16			26	10 59	11 34	26	
27			3 44				8 16			27	—	0 13	27	
28			3 44				8 16			28	0 42	1 10	28	
29			3 45				8 15			29	1 35	1 57	29	
30			3 45				8 15			30	2 18	2 38	30	

Vegetables—Asparagus, Beans (French and Kidney), Beans (Windsor), Cabbage, Carrots, Cauliflowers, Chervil, Corn-Salad, Cucumbers, Endive, (and through the year) Lettuce, Pease, Radishes, Spinach (Spring), Turnips.

For Drying—Orange Thyme, Mint, Tarragon, Burnet.

For Pickling—Garlick.

POSITION OF THE PRINCIPAL  
PLANETS, &c.1st. 15h. 39' S; Libra SbW, H  $\frac{1}{2}$ ; Alpha  
Aquilæ ESE, H  $\frac{1}{2}$ .15th. 16h. 34' S; Antares and Scorpio  
S, H 0.The sun enters the sign  $\Omega$  (Leo) at  
1m. after 5 in the morning of the 23d.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	0	a 14	9	6	a 12	17	0	m 19	25	7	m 30
2	1	4	10	6	57	18	1	17	26	8	22
3	1	52	11	7	44	19	2	13	27	9	14
4	2	37	12	8	34	20	3	8	28	10	6
5	3	21	13	9	27	21	4	1	29	10	56
6	4	4	14	10	23	22	4	53	30	11	44
7	4	46	15	11	21	23	5	45	31	0	a 31
8	5	29	16	....	....	24	6	37			

## USEFUL REMARKS.

Diligence alone is a good patrimony.

Resolution without action is a slothful  
folly; action without resolution is a foolish  
rashness.—*Sir P. Warwick.*Industry is fortune's right hand, fru-  
gality her left.

Idleness is the greatest prodigality.

Industrious wisdom often prevents what  
lazy folly thinks inevitable.He that will have the kernel must crack  
the shell.Without mounting by degrees a man can-  
not obtain to high things.—*Sir P. Sidney.*A mind well trained and long exercised  
in virtue, does not easily change any course  
it once undertakes.—*Sir P. Sidney.*

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 W	. . . . .	Bat. of the Boyne 1690	<i>Barometer.</i> Ins.
2 TH	. . . . .	F.G. Klopstock b. 1724	Mean height . . . . . 29.874
3 F	. . . . .	United States' Ind. 1776	Highest . . . . . 30.300
4 S	. . . . .	S. Richardson d. 1761	Lowest . . . . . 29.390
5 S	3 Sunday after Trinity	Bishop Watson d. 1816	<i>Hygrometer.</i>
6 M	In 3 wks. of H. Tr. 4 ret.	. . . . .	Mean dew point . . . . . 54.5
7 Tu	Oxford Act. & Cam. Com.	S. Whitbread d. 1815	Highest . . . . . 67
8 W	Trinity Term. ends	R. B. Sheridan d. 1816	Lowest . . . . . 41
9 TH	. . . . .	La Fontaine b. 1621	Mean dryness . . . . . 6.5
10 F	Cambridge Term ends	Sir Wm. Blackstone b. 1723	Mean greatest do. of day 13.7
11 S	Oxford Term ends	. . . . .	Greatest dryness . . . . . 20
12 S	4 Sunday after Trinity.	Erasmus d. 1536	<i>Thermometer.</i>
13 M	. . . . .	Dr. Bradley d. 1752	Mean temperature . . . . . 61
14 Tu	. . . . .	Card. Mazarin b. 1602	Highest . . . . . 76
15 W	Swithin . . . . .	Bastille destroyed 1789	Lowest . . . . . 42
16 TH	. . . . .	John Hunter b. 1728	<i>Radiation.</i>
17 F	. . . . .	Sir J. Reynolds b. 1723	Mean greatest power of sun 25.8
18 S	. . . . .	Dr. Watts b. 1674	Greatest power . . . . . 60
19 S	5 Sunday after Trinity K.	Robert Hooke b. 1635	Mean cold of terrestrial ra- diation . . . . . 3.6
20 M	[George IV. Cr. 1821]	B. of Halidown H. 1333	Greatest do. . . . . 13
21 Tu	. . . . .	Fr. Petrarca b. 1304	Ins.
22 W	. . . . .	Profes. Playfair d. 1819	Mean quantity of rain . 2.516
23 TH	. . . . .	W. Ld. Russell b. 1683	Mean of evaporation . . 3.293
24 F	. . . . .	Ld. Shaftesbury b. 1621	
25 S	St. James. . . . .	Un. of Eng. & Scot. 1706	<i>Table of the Winds.</i>
26 S	6 Sun. aft Trin. St. Anne	Gibraltar taken 1704	Days. Dew-P. Days. Dew-P.
27 M	. . . . .	. . . . .	N. 2 $\frac{1}{2}$ 50° S. 2 $\frac{1}{2}$ 58.5
28 Tu	. . . . .	E. of Essex behea. 1540	N.E. 3 49 S.W. 7 59
29 W	. . . . .	Robespierre guill. 1794	E. 2 50.5 W. 5 56
30 TH	. . . . .	John Gray d. 1771	S.E. 4 58 N.W. 5 $\frac{1}{2}$ 53
31 F	. . . . .	Rd. Savage d. 1743	

THIS is, upon an average, the  
hottest month of the year, and  
the increase of the mean tem-  
perature is derived chiefly from  
the night.

A continuance of rainy wea-  
ther commonly happens about  
the middle of the month. This  
periodical tendency to rain has  
given rise to the popular tradi-  
tion of St. Swithin.

When the thermometer rises  
to 80°, the weather generally  
breaks up with a thunder-storm.



## EQUATION OF TIME.

D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.
1 3' 22"	8 4' 37"	16 5' 37"	24 6' 6"
2 3 40	9 4 46	17 5 43	25 6 7
3 3 45	10 4 55	18 5 48	26 6 7
4 3 56	11 5 3	19 5 52	27 6 7
5 4 7	12 5 11	20 5 56	28 6 7
6 4 17	13 5 18	21 5 59	29 6 5
7 4 27	14 5 25	22 6 2	30 6 4
	15 5 32	23 6 4	31 6 1

## THE MOON'S CHANGES.

New ..... 1st day, 5h. 49m. aftern.  
 First Quarter, .. 9th day, 6h. 31m. morn.  
 Full ..... 16th day, 2h. 42m. aftern.  
 Last Quarter, 23d day, 6h. 14m. morn.  
 New ..... 30th day, 5h. 39m. aftern.

M. D.	Length of Day.	Day's decrease	Day breaks.	Twilight ends.
1	16 30	0 4		
6	16 24	0 10		
11	16 15	0 19		
16	16 5	0 29		
21	15 53	0 41		
26	15 39	0 55		
No real Night.				
			0 53	11 3

Day of the Month.	Duration of Light			Garden Plants in Flower.			Duration of Light			High Water at London.			Day of the Month.
	MORNING.						EVENING.						
	Moon's duration.	Sun	Rises.				Sun	Moon's duration.	Days of D's Age.				
				o'Clock. 1 2 3	h m	h m				h m	Morn- ing.	After- noon.	
1			h m	h m	9 10 11	Days of D's Age.	h m	h m	1				
2			3 45	8 15		1	2 47	3 17	2				
3			3 46	8 14		2	3 35	3 54	3				
4			3 46	8 14		3	4 11	4 29	4				
5			3 47	8 13		4	4 46	5 3	5				
6			3 48	8 12		5	5 21	5 39	6				
7			3 48	8 12		6	5 56	6 14	7				
8			3 49	8 11		7	6 32	6 51	8				
9			3 50	8 10		8	7 13	7 34	9				
10			3 51	8 8		9	7 58	8 23	10				
11			3 51	8 8		10	8 55	9 28	11				
12			3 52	8 7		11	10. 6.	10 44	12				
13			3 53	8 6		12	11 23	11 58	13				
14			3 54	8 5		13	— —	0 32	14				
15			3 55	8 4		14	1 0	1 28	15				
16			3 56	8 3		15	1 54	2 20	16				
17			3 57	8 2		16	2 43	3 4	17				
18			3 58	8 1		17	3 24	3 44	18				
19			4 0	8 0		18	4 3	4 22	19				
20			4 2	7 59		19	4 40	5 0	20				
21			4 3	7 57		20	5 18	5 38	21				
22			4 3	7 56		21	5 59	6 20	22				
23			4 4	7 55		22	6 46	7 12	23				
24			4 6	7 53		23	7 41	8 15	24				
25			4 7	7 52		24	8 54	9 38	25				
26			4 8	7 51		25	10 22	11 3	26				
27			4 10	7 49		26	11 42	—	27				
28			4 11	7 48		27	0 14	0 44	28				
29			4 13	7 46		28	1 10	1 33	29				
30			4 14	7 45		29	1 55	2 15	30				
31			4 16	7 43		30	2 34	2 53	31				
			4 17	7 42		1	3 11	3 28					

Vegetables—Artichokes, Asparagus, Beans (French Kidney and Scarlet), Beans (Windsor), Cabbage (Red), Carrots, Cauliflowers, Cucumbers, Lettuce, Pease, Salsify, Spinach (Spring), Turnips.

For Drying—Knotted Marjoram, Winter Savory, Summer Savory.

For Pickling—Nasturtiums, Onions, Gherkins, Radish pods, Cucumbers, Cauliflowers, French Beans.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 17h. 41' S; Gamma Draconis, Z;  
Square of Pegasus EbN, H 4.  
15th. 18h. 37' S; Alpha Lyræ S, H 2.  
The sun enters the sign  $\text{♍}$  (Virgo) at  
33m. after 11 in the morning of the 23d.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	1	a	16	9	7	a	15	17	1	m	53
2	1	59	10	8	9	18	2	48	26	9	46
3	2	42	11	9	5	19	3	42	27	10	33
4	3	24	12	10	3	20	4	36	28	11	18
5	4	7	13	11	1	21	5	29	29	0	a
6	4	50	14	11	59	22	6	22	30	0	45
7	5	36	15	...	...	23	7	15	31	1	28
8	6	24	16	0	m	57	24	8	7		

## USEFUL REMARKS.

A grain of prudence is worth a pound of craft.

The want of due consideration is the cause of all the unhappiness a man brings upon himself.

Discreet stays make speedy journeys; precipitation may prove the downfall of fortune.—*Sir P. Sidney.*

To wilful men,

The injuries that they themselves procure Must be their schoolmasters.—*Shakspeare.*

A danger foreseen is half avoided.

Hear much and speak little; for the tongue is the instrument of the greatest good and greatest evil that is done in the world.—*Sir W. Raleigh.*

Learn betimes to say No.—*Miss Edgeworth.*

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 S	Lammas Day . . .	Battle of the Nile 1798	<i>Barometer.</i> Ins. Mean height . . . . . 29.891 Highest . . . . . 30.260 Lowest . . . . . 29.350
2 S	7 Sunday after Trinity .	Bat. of Blenheim 1704	<i>Hygrometer.</i> Mean-dew point . . . . . 55.3 Highest . . . . . 69 Lowest . . . . . 46
3 M	. . . . .	Arkwright d. 1792	Mean dryness . . . . . 6.3 Mean greatest dō. of day . . . 12.4 Greatest dryness . . . . . 29
4 Tu	. . . . .	Calais taken by Edward III. 1347	<i>Thermometer.</i> Mean temperature . . . . . 61.6 Highest . . . . . 82 Lowest . . . . . 41
5 W	. . . . .	Malebranche b. 1638	<i>Radiation.</i> Mean greatest power of sun 33.1 Greatest power . . . . . 59 Mean cold of terrestrial radiation . . . . . 5.2 Greatest dō. . . . . 12
6 Th	. . . . .	Geo. Caanning d. 1827	Ins. Mean quantity of rain . . . 1.453 Mean of evaporation . . . . . 3.327
7 F	. . . . .	John Dryden b. 1631	<i>Table of the Winds.</i> Days Dew-Point. N. 1 . . . . . 55.5 N.E. 2 1/2 . . . . . 53. E. 1 1/2 . . . . . 55.5 S.E. 3 . . . . . 60. S. 2 1/2 . . . . . 63. S.W. 6 . . . . . 58.5 W. 11 1/2 . . . . . 55. N.W. 3 . . . . . 53.
8 S	. . . . .	Observatory at Greenwich founded 1675	The temperature of this month is but little reduced, owing to the prevalence of hot nights. The action of the sun's rays is considerably assisted by the warm earth which radiates heat into the air; while, in spring, it absorbs every day a proportion of the heat which the sun produces.
9 S	8 Sunday after Trinity	Ant. Lavoisier b. 1743	The greatest heats of summer are generally produced by east and south-east winds; the greatest heats of winter, by south and south-west winds.
10 M	. . . . .	Adm. Blake b. 1599	
11 Tu	. . . . .	And. Marvell d. 1678	
12 W	King Geo. IV. born 1762	Bat. Smoleasko 1812	
13 Th	[Grouse shooting beg.	Jas. Beattie d. 1803	
14 F	. . . . .	Rt. Bloomfield d. 1823	
15 S	. . . . .	The DeWitts murdered 1672	
16 S	9 Sunday after Trinity	W. Whistoa d. 1752	
17 M	. . . . .	W. Wallace behd. 1305	
18 Tu	. . . . .	T. Chatterton d. 1770	
19 W	. . . . .	Rome ta. by Alaric, 410	
20 Th	. . . . .	James Watt d. 1819	
21 F	Duke of Clarence born .	Sir W. Herschel d. 1822	
22 S	. . . . .	Jas. Thomson d. 1748	
23 S	10 Sun. af. Trinity . .	Hugo Grotius d. 1645	
24 M	St. Bartholomew . . .	John Locke b. 1632	
25 Tu	. . . . .	Wm. Paley b. 1743	
26 W	. . . . .	John Bunyan d. 1688	
27 Th	. . . . .	Dr. Jas. Curried. 1805	
28 F	. . . . .		
29 S	. . . . .		
30 S	11 Sunday after Trinity		
31 M	. . . . .		

1829]

AUGUST, XXXI DAYS.

[1829.

## EQUATION OF TIME.

D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.	D. Clock of before M. Sun.
1 5' 58"	8 5' 20"	16 4' 1"	24 2' 9"
2 5 55	9 5 12	17 3 43	25 1 53
3 5 50	10 5 3	18 3 35	26 1 36
4 5 45	11 4 54	19 3 22	27 1 19
5 5 40	12 4 45	20 3 8	28 1 2
6 5 34	13 4 36	21 2 54	29 0 45
7 5 27	14 4 24	22 2 39	30 0 27
	15 4 12	23 2 24	31 0 9

## THE MOON'S CHANGES.

First Quart. 7th day, 10h. 13m. night.  
Full, ..... 14th day, 10h. 26m. night.  
Last Quart. 21st day, 1h. 35m. aftern.  
New, ..... 29th day, 8h. 55m. morn.

M. D.	Length of Day.	Day's decrease	Day breaks.	Twilight ends.
1	15 21	1 13	1 3	10 30
6	15 5	1 29	1 43	10 13
11	14 49	1 45	2 2	9 55
16	14 31	2 3	2 19	9 39
21	14 13	2 21	2 34	9 23
26	13 55	2 39	2 49	9 9

Day of the Month.	Duration of Light.					Garden Plants in Flower.	Duration of Light.					High Water at London.	Day of the Month.				
	MORNING.						EVENING.										
	Moon's duration.				Sun Rises.		Sun Sets.	Moon's duration.						Days of D's Age.			
	o'Clock. 1 2 3 4							o'Clock. 8 9 10 11									
1						Tansy ( <i>Tanacetum vulgare</i> ) Morocco Stock ( <i>Matthiola parviflora</i> ) Siberian Wall-flower ( <i>Cheiranthus ro- stratus</i> ) Shibbing Marygold ( <i>Tagetes lucida</i> ) Winter Cherry ( <i>Physalis Alkekengi</i> ) Long-flowered Marvel of Peru ( <i>Mira- bilis longiflora</i> ) Pyramidal Monksblood ( <i>Aconitum pyra- midale</i> )	h	m				2	h	m		1	
2							4	19				3	3	46		4	2
3							4	20				4	4	19		4	34
4							4	22				5	4	52		5	0
5							4	23				5	5	24		5	41
6							4	25				6	5	59		6	17
7							4	27				7	6	35		6	54
8							4	28				8	7	17		7	41
9							4	30				9	8	7		8	39
10						4	32				10	9	17		9	57	
11						4	33				11	10	41		10	24	
12						4	35				12	—	—		0	4	
13						4	37				13	0	39		1	11	
14						4	39				14	1	41		2	12	
15						4	40				15	2	30		2	51	
16						4	42				16	3	11		3	31	
17						4	44				17	3	50		4	9	
18						4	46				18	4	27		4	46	
19						4	47				19	5	4		5	22	
20						4	49				20	5	43		6	6	
21						4	51				21	6	30		6	57	
22						4	53				22	7	26		7	58	
23						4	55				23	8	34		9	14	
24						4	57				24	9	57		10	40	
25						5	0				25	11	18		11	53	
26						5	2				26	—	—		0	22	
27						5	4				27	0	49		1	12	
28						5	6				28	1	34		1	54	
29						5	8				29	2	13		2	30	
30						5	10				30	2	48		3	6	
31						5	12				31	3	22		3	39	
						5	12				2	3	55		4	11	

Vegetables—Artichokes, Beans (French, Kidney, and Scarlet), Beans (Windsor), Cabbage (Red), Carrots, Cauliflowers, Cucumbers, Lettuce, Onions, Pease, Salsify, Shallots, Turnips. For Drying—Basil, Sage. For Pickling—Capsicums, Walnuts, Chillies, Love Apples. Fish—Oysters, 4th August.

POSITION OF THE PRINCIPAL  
PLANETS, &c.1st. 19h. 43' S; Aquila S, H<sub>2</sub>; Sagittarius SbW, H 0.

15th. 20h. 39' S; Alpha Cygni S, H Z.

The Harvest Moon is the full moon which happens on the 13th of this month.

The sun enters the sign ♎ (Libra) at 17m. after 8 in the morning of the 23d.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	2	a	11	9	8	a	51	17	3	m	28
2	2	54	10	9	48	18	4	23	26	10	53
3	3	39	11	10	46	19	5	19	27	11	36
4	4	25	12	11	43	20	6	11	28	0	a
5	5	14	13	....	21	7	3	29	1	2	
6	6	5	14	0	m	40	22	7	52	30	1
7	6	58	15	1	36	23	8	40			
8	7	54	16	2	32	24	9	26			

## USEFUL REMARKS.

Corrupt company is more infectious than corrupt air.—*Lord Burleigh.*There is no security in evil society, where the bad are often made worse, the good seldom better.—*Sir P. Warwick.*

The bitterest fruit of distress is the bread of another's baking; but if it must be eaten in base company, fortune has done her worst.

He is my friend that succoureth me—not he that pitieth me.

The friends thou hast, and their adoption tried,

Grapple them to thy soul with hooks of steel;

But do not dull thy palm with entertainment

Of each new-hatch'd, unfledged comrade.  
*Shakspeare.*

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 Tu	Partridge Shooting beg.	Surren. of Copenhagen to the English 1807	<i>Barometer.</i> Ins.
2 W	.	Fire of London 1666	Mean height . . . . . 29.931
3 Th	.	Cromwell d. 1658	Highest . . . . . 30.410
4 F	.		Lowest . . . . . 29.410
5 S	.		<i>Hygrometer.</i>
6 S	12 Sunday after Trinity	Jonas Hanway d. 1786	Mean dew point . . . . . 52.3
7 M	.	Malta taken 1800	Highest . . . . . 66
8 Tu	.	Colbert d. 1683	Lowest . . . . . 37
9 W	.	Dr. Johnson b. 1709	Mean dryness . . . . . 5.5
10 Th	.	Bat. of Borodino 1812	Mean greatest do. of day 11.1
11 F	.	L. G. Ariosto b. 1474	Greatest dryness . . . . . 20
12 S	.	Wm. the Congr. d. 1087	<i>Thermometer.</i>
13 S	13 Sunday after Trinity	Rd. Reynolds d. 1816	Mean temperature . . . . . 57.8
14 M	Salm. Fish. in Scot. ends	Lord Thurlow d. 1806	Highest . . . . . 76
15 Tu	.	James Thomson b. 1700	Lowest . . . . . 36
16 W	Ember Week	Gen. Wolfe killed 1759	<i>Radiation.</i>
17 Th	.	C. J. Fox d. 1806	Mean greatest power of sun 32.7
18 F	.	Burn. of Moscow 1812	Greatest power . . . . . 54
19 S	.		Mean cold of terrestrial radiation . . . . . 5.4
20 S	14 S. aft. Trin. St. Matth.		Greatest do. . . . . 13
21 M	.		Ins.
22 Tu	.		Mean quantity of rain . . . . . 2.193
23 W	.		Mean of evaporation . . . . . 2.620
24 Th	.		<i>Table of the Winds.</i>
25 F	.		Days. Dew-Point.
26 S	.	Lawr. Sterne d. 1768	N. . . . . 45°
27 S	15 Sunday after Trinity	Matthew Prior d. 1721	N.E. . . . . 50
28 M	.	Battle of Poitiers 1356	E. . . . . 52
29 Tu	MICHAELMAS DAY.	W. Wykeham d. 1404	S.E. . . . . 56
30 W	.	Battle of Newbury 1643	S. . . . . 61
	.	Charles V. d. 1558	S.W. . . . . 51
	.	Her. Boerhaave d. 1738	W. . . . . 54
	.	Samuel Butler d. 1680	N.W. . . . . 49.5
	.	Robert Dodsley d. 1764	In this, the first month of Autumn, the reduction of temperature begins to be sensibly felt; but still less during the night than the day.
	.	Werner b. 1750	At the latter part of this month, or the beginning of the next, the equinoctial gales may be expected. The changes of the barometer are great and sudden.
	.	James Brindley d. 1772	Some of the finest weather of the whole year commonly occurs in this month.
	.	Buchanan d. 1582	
	.	Lord Nelson b. 1758	

## EQUATION OF TIME.

D. Clock of M. Sun.	D. Clock of M. Sun.	D. Clock of M. Sun.	D. Clock of M. Sun.
1 0' 9"	8 2' 26"	16 5' 14"	24 8' 1"
2 0 28	9 2 47	17 5 35	25 8 24
3 0 47	10 3 8	18 5 56	26 8 42
4 1 7	11 3 28	19 6 17	27 9 2
5 1 26	12 3 49	20 6 38	28 9 22
6 1 46	13 4 10	21 6 59	29 9 41
7 2 6	14 4 31	22 7 20	30 10 1
	15 4 52	23 7 40	

## THE MOON'S CHANGES.

First Quarter, 6th day, 0h. 0m. noon.  
Full, ..... 13th day, 6h. 29m. morn.  
Last Quarter, 20th day, 0h. 6m. morn.  
New, ..... 28th day, 2h. 3m. morn.

M. D.	Length of Day.	Day's decrease.	Day breaks.	Twilight ends.
1	13 31	3 3	3 6	8 52
6	13 13	3 21	3 19	8 39
11	12 53	3 41	3 32	8 26
16	12 33	4 1	3 44	8 14
21	12 15	4 19	3 54	8 2
26	11 55	4 39	4 7	7 51

Day of the Month.	Duration of Light.					Garden Plants in Flower.	Duration of Light.					Days of D's Age.	High Water at London.		Day of the Month.
	MORNING.						EVENING.						Morn ing.	After- noon.	
	Moon's duration.	Sun Rises.	o'Clock.				Sun Sets.	Moon's duration.	o'Clock.						
			1	2	3				4	5	7				
1						Changeable Colchicum ( <i>Colchicum versicolor</i> )						3	h m	h m	1
2						Michaelmas Daisy ( <i>Aster Tridactylus</i> )						4	4 28	4 44	2
3						Jerusalem Artichoke ( <i>Helianthus tuberosus</i> )						5	5 0	5 17	3
4						Devil's Bit Scabious ( <i>Scabiosa Succisa</i> )						6	5 35	5 52	4
5						Chinese Arrow-head ( <i>Sagittaria Sinensis</i> )						7	6 12	6 31	5
6						Southernwood ( <i>Aritonisia Abrotanum</i> )						8	6 53	7 15	6
7						Golden Star Lily ( <i>Amaryllis aurea</i> )						9	7 42	8 11	7
8						Italian Pimpernel ( <i>Anagallis Monelli</i> )						10	8 48	9 29	8
9												11	10 15	11 4	9
10						Autumnal Hyacinth ( <i>Scilla autumnalis</i> )						12	11 51	—	10
11						Whorled Coreopsis ( <i>Coreopsis verticillata</i> )						13	0 25	1 0	11
12						Autumnal Crocus ( <i>Crocus autumnalis</i> )						14	1 27	1 54	12
13						Horn of Plenty ( <i>Cornucopia cucullatum</i> )						15	2 19	2 41	13
14						Rose Feverfew ( <i>Pyrethrum roseum</i> )						16	3 1	3 20	14
15						Downy Helenium ( <i>Helenium pubescens</i> )						17	3 39	3 57	15
16						Anemone ( <i>Aster Anemone</i> )						18	4 16	4 34	16
17						Oval Fleabane ( <i>Conyza bifrons</i> )						19	4 53	5 13	17
18						Late Saffron ( <i>Crocus serotinus</i> )						20	5 34	5 57	18
19												21	6 21	6 47	19
20						Autumnal Hyacinth ( <i>Scilla autumnalis</i> )						22	7 16	7 46	20
21						Whorled Coreopsis ( <i>Coreopsis verticillata</i> )						23	8 19	8 57	21
22						Autumnal Crocus ( <i>Crocus autumnalis</i> )						24	9 38	10 18	22
23						Horn of Plenty ( <i>Cornucopia cucullatum</i> )						25	10 55	11 30	23
24						Rose Feverfew ( <i>Pyrethrum roseum</i> )						26	—	0 1	24
25						Downy Helenium ( <i>Helenium pubescens</i> )						27	0 27	0 52	25
26						Anemone ( <i>Aster Anemone</i> )						28	1 13	1 33	26
27						Oval Fleabane ( <i>Conyza bifrons</i> )						29	1 53	2 10	27
28						Late Saffron ( <i>Crocus serotinus</i> )						30	2 28	2 45	28
29												1	3 3	3 18	29
30						Autumnal Hyacinth ( <i>Scilla autumnalis</i> )						2	3 36	3 51	30

**Vegetables**—Artichokes, Jerusalem Artichokes, Beans (Scarlet), Celery, Leeks, Onions, Shallots, Turnips.  
**Meat**—Beef is best from Michaelmas to Midsummer.

**Fish**—Salmon-fishing in Scotland is prohibited from the 14th of September to the 1st February.

POSITION OF THE PRINCIPAL  
PLANETS, &c.1st. 21h. 41' S; Algol ENE, H<sub>2</sub>.15th. 22h. 37' S; Pisces SE, H<sub>2</sub>.The sun enters the sign  $\text{M}$  (Scorpio)  
at 29m. after 4 in the afternoon of the 23d.

## SOUTHING OF THE MOON.

D.	h.	m.	D.	h.	m.	D.	h.	m.	D.	h.	m.
1	3	a 32	9	9	a 34	17	4	m 9	25	10	m 23
2	3	19	10	10	30	18	5	3	26	11	6
3	4	9	11	11	26	19	5	54	27	11	50
4	5	0	12	....	....	20	6	43	28	0	a 35
5	5	54	13	0	m 23	21	7	30	29	1	22
6	6	43	14	1	20	22	8	15	30	2	11
7	7	43	15	2	17	23	8	53	31	3	2
8	8	39	16	3	14	24	9	41			

## USEFUL REMARKS.

The most common things are the most useful; which shows both the wisdom and goodness of the great Lord of the family of the world.

Fine sense and exalted sense are not half so useful as common sense.—*Swift*.

Let not the blessings we receive daily from God make us not to value, or not praise Him, because they be common.—*Walton*.

He that knoweth *useful* things, not he that knoweth *many* things, is the wise man.

It is shameful for a man to live as a stranger in his own country, and to be un-informed of her affairs and interests.—*Manutius*.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 T <sub>H</sub>	Pheasant Shooting beg.	Geo. Whitefield <i>d.</i> 1730	<i>Barometer.</i> Ins.
2 F	.....	Lond. Univ. open. 1828	Mean height . . . . . 29.774
3 S	.....	Robt. Barclay <i>d.</i> 1690	Highest . . . . . 30.610
4 S	16 Sunday after Trinity	.....	Lowest . . . . . 28.740
5 M	.....	.....	<i>Hygrometer.</i>
6 T <sub>U</sub>	.....	Peace proclaimed with America 1783	Mean dew point . . . . . 44.8
7 W	.....	.....	Highest . . . . . 66
8 T <sub>H</sub>	.....	Dr. Kippis <i>d.</i> 1795	Lowest . . . . . 32
9 F	.....	Edystone Lt. House, completed 1759	Mean dryness . . . . . 4.1
10 S	Oxford & Cam. Term beg.	.....	Mean greatest do. of day 4.5
11 S	17 Sunday after Trinity	Ld. Duncan's vic. 1797	Greatest dryness . . . . . 15
12 M	.....	America discov. 1492	<i>Thermometer.</i>
13 T <sub>U</sub>	.....	Edward VI. <i>b.</i> 1537	Mean temperature . . . . . 48.9
14 W	.....	Murat, King of Naples, shot 1815	Highest . . . . . 68
15 T <sub>H</sub>	.....	Wm. Penn <i>b.</i> 1614	Lowest . . . . . 27
16 F	.....	Virgil <i>b.</i> B.C. 70	<i>Radiation.</i>
17 S	.....	Ridley and Latimer burnt 1555	Mean greatest power of sun 27.5
18 S	18 Sunday after Trinity	Sir P. Sydney <i>d.</i> 1586	Greatest power . . . . . 43
19 M	[St. Luke.]	John Dunning <i>b.</i> 1731	Mean cold of terrestrial radiation . . . . . 4.8
20 T <sub>U</sub>	.....	Dean Swift <i>d.</i> 1745	Greatest do. . . . . 11
21 W	.....	Sir C. Wren <i>b.</i> 1632	Ins.
22 T <sub>H</sub>	.....	Tob. Smollett <i>d.</i> 1771	Mean quantity of rain . 2.073
23 F	.....	Bat. of Trafalgar 1805	Mean of evaporation . . 1.498
24 S	.....	Battle of Edghill 1642	<i>Table of the Winds.</i>
25 S	19 Sunday after Trinity	Wm. Prynne <i>d.</i> 1669	Days. Dew-Point.
26 M	.....	Archb. Tillotson <i>d.</i> 1694	N. 3 . . . . . 38.5
27 T <sub>U</sub>	.....	Bat. of Agincourt 1415	N.E. 34 . . . . . 41.5
28 W	St. Simon and St. Jude	Geof. Chancer <i>d.</i> 1400	E. 34 . . . . . 45.5
29 T <sub>H</sub>	Hare Hunting begins	Dr. Doddridge <i>d.</i> 1751	S.E. 34 . . . . . 49.
30 F	.....	Capt. J. Cook <i>b.</i> 1723	S. 21 . . . . . 53.5
31 S	.....	D'Alembert <i>d.</i> 1783	S.W. 54 . . . . . 50.5
		Erasmus <i>b.</i> 1467	W. 5 . . . . . 46.5
		Edm. Calamy <i>d.</i> 1666	N.W. 64 . . . . . 43.
		Sir W. Raleigh <i>b.</i> 1618	
		King Alfred <i>d.</i> 900	

THE moisture of the atmosphere greatly increases, and evaporation diminishes. Now that the fruits of the earth are laid up in store, the increase of wet is attended by no injurious effects; the remaining heat of the earth is preserved from needless expenditure, and guarded from dissipation, by an increasing canopy of clouds, by which the effect of radiation is greatly reduced.

## EQUATION OF TIME.

D. of M.	Clock of after Sun.	D. of M.	Clock of after Sun.	D. of M.	Clock of after Sun.	D. of M.	Clock of after Sun.
1	10' 20"	8	12' 25"	16	14' 22"	24	15' 42"
2	10 38	9	12 41	17	14 34	25	15 49
3	10 57	10	12 57	18	14 46	26	15 55
4	11 15	11	13 12	19	14 57	27	16 0
5	11 33	12	13 27	20	15 7	28	16 5
6	11 51	13	13 42	21	15 17	29	16 9
7	12 8	14	13 56	22	15 26	30	16 12
		15	14 9	23	15 34	31	16 14

## THE MOON'S CHANGES.

First Quart. 5th day, 11h. 49m. night.  
Full, ..... 12th day, 3h. 29m. aftern.  
Last Quart. 19th day, 2h. 30m. aftern.  
New, ..... 27th day, 7h. 41m. night.

M. D.	Length of Day.	Day's decrease	Day breaks.	Twilight ends.
1	11 35	4 59	4 18	7 40
6	11 15	5 19	4 29	7 30
11	10 55	5 39	4 39	7 20
16	10 37	5 57	4 48	7 11
21	10 17	6 17	4 57	7 2
26	9 59	6 35	5 6	6 53

Day of the Month.	Duration of Light.						G. P. in Flower.	Duration of Light.						Days of ☾'s Age.	High Water at London.		Day of the Month.	
	MORNING.							EVENING.										
	Moon's duration.							Moon's duration.							Morn- ing.			
	o'Clock. 1 2 3 4 5 6							o'Clock. 6 7 8 9 10 11							After- noon.			
1								Sun Rises. h m		Sun Sets. h m					3	h m	h m	1
2								6 12		5 47					4	4 42	4 59	2
3								6 14		5 45					5	5 17	5 35	3
4								6 16		5 43					6	5 56	6 15	4
5								6 18		5 41					7	6 37	6 59	5
6								6 20		5 39					8	7 26	7 57	6
7								6 22		5 37					9	8 31	9 12	7
8								6 24		5 35					10	9 58	10 44	8
9								6 26		5 33					11	11 30	—	9
10								6 28		5 31					12	0 11	0 46	10
11								6 30		5 29					13	1 15	1 43	11
12								6 32		5 27					14	2 7	2 28	12
13								6 34		5 25					15	2 49	3 9	13
14								6 35		5 24					16	3 27	3 46	14
15								6 37		5 22					17	4 5	4 25	15
16								6 39		5 20					18	4 43	5 4	16
17								6 41		5 18					19	5 25	5 47	17
18								6 43		5 16					20	6 11	6 35	18
19								6 45		5 14					21	7 1	7 29	19
20								6 47		5 12					22	7 59	8 33	20
21								6 49		5 10					23	9 6	9 44	21
22								6 51		5 8					24	10 21	10 53	22
23								6 53		5 6					25	11 27	11 53	23
24								6 55		5 4					26	—	0 21	24
25								6 57		5 2					27	0 45	1 6	25
26								6 58		5 1					28	1 56	1 45	26
27								7 0		4 59					29	2 4	2 21	27
28								7 2		4 57					30	2 39	2 56	28
29								7 4		4 55					31	3 14	3 31	29
30								7 6		4 53					32	3 49	4 6	30
31								7 8		4 51					33	4 25	4 45	31
								7 9		4 50					34	5 5	5 21	32

Vegetables—Artichokes, Brocoli, Celery, Leeks, Onions, Parsnips, Shallots, Spinach (Winter), Turnips.  
Poultry is cheapest about this time when the game-season commences.

POSITION OF THE PRINCIPAL  
PLANETS, &c.

1st. 23h. 44' S; Square of Pegasus  
S, H  $\frac{3}{4}$ .  
15th. 0h. 39' S; Alpha Ceti SE, H  $\frac{1}{4}$ ;  
Pleiades ESE, H  $\frac{1}{2}$ ; Alpha Lyræ WNW, H  $\frac{3}{4}$ .  
The sun enters the sign ♐ (Sagittarius)  
at 53m. after 12 in the afternoon of the 22d.

## SOUTHING OF THE MOON.

D.	h	m	D.	h	m	D.	h	m	D.	h	m
1	3a	54	9	11	a	4	17	5m	24	25	11m
2	4	47	10	....	....	18	6	10	26	0	a
3	5	41	11	0	m	1	19	6	54	27	0
4	6	34	12	0	58	20	7	36	28	1	46
5	7	27	13	1	55	21	8	18	29	2	39
6	8	21	14	2	51	22	9	0	30	3	32
7	9	14	15	3	44	23	9	43			
8	10	9	16	4	36	24	10	28			

## USEFUL REMARKS.

A good conscience is to the soul what health is to the body.—*Addison*.

No man ever offended his own conscience, but first or last it was revenged upon him.—*South*.

What stronger breast-plate than a heart untainted?

Thrice is he arm'd that hath his quarrel just; And he but naked, though lock'd up in steel, Whose conscience with injustice is corrupted.—*Shakspeare*.

Nothing is truly infamous but what is wicked; and therefore shame can never disturb an innocent and virtuous mind.—*Sherlock*.

Hypocrisy desires to seem good rather than to be so; honesty desires to be good rather than to seem so.—*Warwick*.

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 $\frac{3}{4}$	20 S. aft. Tr. All Saints {	Sir Matt. Hale b. 1600	<i>Barometer.</i> Ins.
2 M	All Souls . . . . .	Earthq. at Lisbon 1755	Mean height . . . . . 29.776
3 Tu	On M. of All Souls 1 r. Prs.	Sir S. Romilly d. 1818	Highest . . . . . 30.270
4 W	. . . . . [Sophia b.]	Bp. Lowth d. 1787	Lowest . . . . . 29.080
5 Th	Gunpowder Plot 1605	King William landed, 1688	<i>Hygrometer.</i>
6 F	Michaelmas Term begins	Battle of Jemappe 1792	Mean dew point . . . . . 40.5
7 S	. . . . .	Pss. Charlotte d. 1817	Highest . . . . . 40
8 $\frac{3}{4}$	21 S. af. Tr. Prs. Augusta	Sir Martin Frobisher killed 1594	Lowest . . . . . 25
9 M	Ld. Mayor's Day [Soph. b.]	. . . . .	Mean dryness . . . . . 2.4
10 Tu	. . . . .	Dr. Halley b. 1656	Mean greatest do. of day . . . . . 4.7
11 W	St. Martin . . . . .	Wm. Camden d. 1623	Greatest dryness . . . . . 14
12 Th	Cam. Term div. m. On M.	Martin Luther b. 1483	<i>Thermometer.</i>
13 F	[St. Mart. 2 ret.]	Cath. of Russia d. 1796	Mean temperature . . . . . 42.9
14 S	. . . . .	. . . . .	Highest . . . . . 62
15 $\frac{3}{4}$	22 Sunday after Trinity {	Rd. Baxter b. 1615	Lowest . . . . . 23
16 M	. . . . .	George Fox d. 1620	<i>Radiation.</i>
17 Tu	. . . . .	Leibnitz d. 1716	Mean greatest power of sun . . . . . 6.8
18 W	In 8 d. of St. Mart. 3 ret.	Lord Chatham b. 1708	Greatest power . . . . . 23.5
19 Th	. . . . .	Lavater b. 1741	Mean cold of terrestrial radiation . . . . . 3.6
20 F	. . . . .	James Ferguson d. 1776	Greatest do. . . . . 10
21 S	. . . . .	Le Sage d. 1747	<i>Ins.</i>
22 $\frac{3}{4}$	23 Sun. after Trin. Cecilia	Cortez sailed to conquer Mexico 1518	Mean quantity of rain . . . . . 2.400
23 M	. . . . .	Card. Wolsey d. 1530	Mean of evaporation . . . . . 0.770
24 Tu	. . . . .	C. of G. Hope dou. 1497	<i>Table of the Winds.</i>
25 W	In 15 days of St. Mart. 4 ret.	Lord Hawke's Victory [1759]	Days. Dew-Point.
26 Th	. . . . .	. . . . .	N. . . . . 38°
27 F	. . . . .	Lawrence Sterne b. 1713	N.E. . . . . 37
28 S	Michaelmas Term ends	Pce. with America 1814	E. . . . . 40
29 $\frac{3}{4}$	Advent Sunday . . . . .	Dr. Isaac Watts d. 1748	S.E. . . . . 46
30 M	St. Andrew . . . . .	Wm. Cowper b. 1731	S. . . . . 48
		Bishop Lowth b. 1710	S.W. . . . . 47
		. . . . .	W. . . . . 42
		. . . . .	N.W. . . . . 35.5
		John Selden d. 1654	This month is commonly dark and dreary, and the atmosphere is nearly saturated with moisture. The comparative warmth of the season is owing to the heat given out by the condensation of the vapour into rain, &c. Dense fogs and mists are common, and a gloomy, windy sky are prevailing characteristics of this month.



## EQUATION OF TIME.

## THE MOON'S CHANGES.

First Quarter, 4th day, 9h. 51m. morn.  
 Full, ..... 11th day, 1h. 40m. morn.  
 Last Quarter, 29th day, 8h. 51m. morn.  
 New, ..... 7th day, 0h. 33m. morn.

D. of M.	Clock after Sun.	D. of M.	Clock after Sun.	D. of M.	Clock after Sun.	D. of M.	Clock after Sun.	M.	Length of Day.	Day's decrease	Day breaks.	Twilight ends.
1	16' 16"	8	16' 5"	16	15' 3"	24	13' 6"	1	9 37	6 57	5 16	6 43
2	16 17	9	16 0	17	14 51	25	12 47	2	9 19	7 15	5 24	6 35
3	16 17	10	15 54	18	14 38	26	12 23	3	9 1	7 33	5 31	6 28
4	16 16	11	15 43	19	14 25	27	12 9	4	8 43	7 51	5 37	6 22
5	16 14	12	15 41	20	14 11	28	11 48	5	8 31	8 3	5 43	6 14
6	16 12	13	15 32	21	13 56	29	11 27	6	8 18	8 16	5 49	6 11
7	16 9	14	15 23	22	13 40	30	11 5					
		15	15 13	23	13 23							

Day of the Month.	Duration of Light.							G. P. in F.	Duration of Light.							Days of Moon's Age.	High Water at London.				Day of the Month.				
	MORNING.								EVENING.																
	Moon's duration.								Sun Sets.	Moon's duration.							Morn-ing.	After-noon.							
	o'Clock.									o'Clock.															
	1	2	3	4	5	6	7		h	m	h	m	5	6	7	8	9	10	11		h	m	h	m	
1											4	48								5	5	40	6	0	
2											4	46								6	6	23	6	45	2
3											4	44								7	7	11	7	39	3
4											4	42								8	8	12	8	49	4
5											4	41								9	9	32	10	17	5
6											4	39								10	11	3	11	35	6
7											4	37								11	—	—	0	23	7
8											4	35								12	0	53	1	22	8
9											4	34								13	1	47	2	11	9
10											4	32								14	2	32	2	52	10
11											4	30								15	3	12	3	32	11
12											4	29								16	3	51	4	10	12
13											4	27								17	4	29	4	49	13
14											4	26								18	5	9	7	31	14
15											4	24								19	5	51	6	14	15
16											4	22								20	6	38	7	1	16
17											4	21								21	7	27	7	53	17
18											4	19								22	8	22	8	52	18
19											4	18								23	9	25	9	57	19
20											4	17								24	10	29	11	1	20
21											4	15								25	11	31	11	59	21
22											4	14								26	—	—	0	23	22
23											4	13								27	0	47	1	8	23
24											4	12								28	1	30	1	51	24
25											4	10								29	2	11	2	29	25
26											4	9								30	2	49	3	8	26
27											4	8								1	3	27	3	45	27
28											4	7								2	4	5	4	24	28
29											4	6								3	4	43	5	2	29
30											4	4								4	5	21	5	41	30
													</												

**Vegetables**—Borcole or Scotch Kale, Broccoli, Cardoons, Celery, Leeks, Onions, Parsnips, Shallots, Spinach (Winter.)

**Fish**—The price of Sea-Fish depends entirely on accident. There are seasons when every sort of fish is unwholesome and even poisonous.

POSITION OF THE PRINCIPAL PLANETS, &c.

1st. 1h. 43' S; Alpha Arietis S, H 3.  
Venus attains her greatest elongation  
on the 26th of this month.  
15h. 2h. 38' S; Alpha Ceti S, H 1;  
Delphinus WbN, H 0; Orion's Belt SE, H 1.  
The sun enters the sign ♊ (Capricorn)  
at 19m. after 1 in the morning of the 22d.

SOUTHING OF THE MOON.

D. h m	D. h m	D. h m	D. h m
1 4 a 25	9 11 a 30	17 5 m 21	25 11 m 24
2 5 18	10 . . . .	18 6 3	26 0 a 18
3 6 9	11 0 m 26	19 6 45	27 1 13
4 7 1	12 1 21	20 7 27	28 2 8
5 7 52	13 2 14	21 8 10	29 3 1
6 8 45	14 3 5	22 8 53	30 3 51
7 9 39	15 3 52	23 9 42	31 4 46
8 10 34	16 4 37	24 10 32	

USEFUL REMARKS.

Of all poverty that of the mind is the most deplorable.

It is impossible to make people understand their ignorance; for it requires knowledge to perceive it; and therefore he that can perceive it hath it not.—*Bishop Taylor.*

By looking into physical causes our minds are opened and enlarged; and in this pursuit, whether we take or whether we lose the game, the chase is certainly of service.—*Burke.*

Knowledge directeth practice, but yet practice increaseth knowledge.

The end of learning is to know God, and out of that knowledge to love him and to imitate him, as we may the nearest by possessing our souls of true virtue.—*Milton.*

Day.	Sundays, and Remarkable Days.	Anniversaries.	Remarks on Weather.
1 Tu	. . . . .	Alexander of Russia d. 1825	<i>Barometer.</i> Ins. Mean height . . . . . 29.693 Highest . . . . . 30.320 Lowest . . . . . 29.120
2 W	. . . . .	Bonaparte crown. 1804	<i>Hygrometer.</i> Mean dew point . . . . . 37.6 Highest . . . . . 53 Lowest . . . . . 15
3 Th	. . . . .	Luigi Pulci b. 1431	Mean dryness . . . . . 1.7 Mean greatest do. of day . . . . . 3.3 Greatest dryness . . . . . 10
4 F	. . . . .	Abdica. of Jas. II. 1688	<i>Thermometer.</i> Mean temperature . . . . . 39.3 Highest . . . . . 55 Lowest . . . . . 17
5 S	. . . . .	Card. Richelieu d. 1642	<i>Radiation.</i> Mean greatest power of sun . . . . . 5.4 Greatest power . . . . . 12.5 Mean cold of terrestrial radiation . . . . . 3.5 Greatest do. . . . . 11
6 S	2 Sunday in Advent		<i>Ins.</i> Mean quantity of rain . . . . . 2.426 Mean of evaporation . . . . . 0.516
7 M	. . . . .	Algernon Sydney be-headed 1683	<i>Table of the Winds.</i> Days. Dew-Point. N. . . . . 1 . . . . . 31° 5 N.E. . . . . 2 1/2 . . . . . 29 E. . . . . 3 1/2 . . . . . 27.5 S.E. . . . . 4 . . . . . 38 S. . . . . 2 . . . . . 45.5 S.W. . . . . 8 1/2 . . . . . 44 W. . . . . 6 . . . . . 40 N.W. . . . . 4 . . . . . 35
8 Tu	. . . . .	Rd. Baxter d. 1691	THE frosts of this month, the first of the winter quarter, are very seldom of long continuance.
9 W	. . . . .	John Milton b. 1603	The mean temperature of the whole year is not found to vary, in different years, more than four degrees and a half.
10 Th	. . . . .	Gt. Commer. Panic 1825	
11 F	. . . . .	Chas. XII. killed 1718	
12 S	. . . . .	John Gay d. 1732 Lord Hood b. 1724	
13 S	3 Sunday in Advent	Hen. IV. France b. 1553	
14 M	. . . . .	G. Washington d. 1799	
15 Tu	. . . . .	Mrs. Trimmer d. 1810	
16 W	Cam. T. ends. Em. Week	Cromwell declared Protector 1653	
17 Th	Oxford Term ends		
18 F	. . . . .		
19 S	. . . . .	Tycho Brahe b. 1546	
20 S	4 Sunday in Advent		
21 M	St. Thomas		
22 Tu	. . . . .	James II. fled from Rochester 1688	
23 W	. . . . .	Dr. Beddoes d. 1808	
24 Th	. . . . .	Sir I. Newton b. 1642	
25 F	CHRISTMAS DAY	Dr. Fothergill d. 1780	
26 S	St. Stephen	John Kepler b. 1571	
27 S	1 Sun. af. Christ. St. John		
28 M	Innocents		
29 Tu	. . . . .	Ld. Stafford red. 1630	
30 W	. . . . .	Robert Boyle d. 1691	
31 Th	. . . . .	John Flamstead d. 1719 Boerhaave b. 1668	

## EQUATION OF TIME.

## THE MOON'S CHANGES.

First Quart. 3d day, 6h. 33m. night.  
 Full, ..... 10th day, 1h. 38m. aftern.  
 Last Quart. 18th day, 6h. 4m. morn.  
 New, ..... 26th day, 3h. 36m. morn.

D. Clock M. Sun.	D. Clock of after M. Sun.	D. Clock of after M. Sun.	D. Clock of before M. Sun.	M.	Length of Day.	Day's decrease	Day breaks.	Twilight ends.
1 10' 43"	9 7' 23"	17 3' 36"	25be. 0' 24"	1	8 6	8 28	5 53	6 7
2 10 20	10 6 56	18 3 6	26 0 54	6	7 58	8 36	5 57	6 3
3 9 56	11 6 28	19 2 36	27 1 24	11	7 50	8 44	5 59	6 1
4 9 32	12 6 0	20 2 6	28 1 54	16	7 46	8 48	6 0	6 0
5 9 7	13 5 32	21 1 36	29 2 23	21	7 44	8 50	6 1	5 59
6 8 42	14 5 3	22 1 6	30 2 53	26	7 46	incre. 2	6 0	6 0
7 8 16	15 4 34	23 0 36	31 3 22					
8 7 50	16 4 5	24 af. 0 6						

Day of the Month.	Duration of Light.							G. P. in F.	Duration of Light.							Days of D's Age.	High Water at London.				Day of the Month.			
	MORNING.								EVENING.															
	Moon's duration.								Moon's duration.															
	o'Clock.								o'Clock.															
	1	2	3	4	5	6	7		Sun Sets.	h	m	5	6	7	8	9	10	11		Morn- ing.	After- noon.			
																				h	m	h	m	
1										4	3								5	6	0	6	23	1
2										4	2								6	6	48	7	13	2
3										4	1								7	42	8	12		3
4										4	0								8	8	50	9	32	4
5										4	0								9	10	17	11	0	5
6										3	59								10	11	43	—	—	6
7										3	58								11	0	14	0	50	7
8										3	57								12	1	18	1	43	8
9										3	57								13	2	3	2	23	9
10										3	56								14	2	51	3	7	10
11										3	55								15	3	27	3	47	11
12										3	55								16	4	6	4	21	12
13										3	54								17	4	45	5	4	13
14										3	54								18	5	23	5	42	14
15										3	54								19	6	1	6	22	15
16										3	53								20	6	42	7	3	16
17										3	53								21	7	25	7	49	17
18										3	53								22	8	14	8	42	18
19										3	53								23	9	11	9	42	19
20										3	52								24	10	16	10	46	20
21										3	52								25	11	21	11	54	21
22										3	52								26	—	—	0	19	22
23										3	52								27	0	46	1	12	23
24										3	52								28	1	34	1	57	24
25										3	53								29	2	19	2	40	25
26										3	53								30	3	1	3	23	26
27										3	53								1	3	41	4	0	27
28										3	53								2	4	20	4	39	28
29										3	54								3	4	57	5	16	29
30										3	54								4	5	35	5	53	30
31										3	55								5	6	17	6	39	31

Vegetables—Borcole or Scotch Kale, Brocoli, Cardoons, Celery, Leeks, Parsnips, Shallots, Spinach (winter.)  
 \* Some weak persons affect to despise articles of food when they are plentiful and cheap, that is, when they are in greatest perfection. The taste for forced vegetables and fruit and early poultry and lamb, always leads to ruinous expense.

## TIDE TABLE.

\*\*\* The Tide Tables in the BRITISH ALMANAC are computed by means of a Table in Mackay's Navigation, the arguments of which are the Moon's horizontal parallax, and the time of her meridian passage.

To find the time of High Water at the following Places, it will be necessary to add, or subtract, as the case may be, from the time of High Water at London Bridge. For example:—On the 1st of January, the morning High Water at London Bridge is at 1h. 14m.; the High Water at Dover Harbour is 3h. 55m. earlier; subtract, according to the direction, 3h. 55m. from 1h. 14m., and the time of High Water at Dover Harbour, on that day, will be found to be at 7h. 19m.

		h. m.			h. m.
Aberdeen	sub.	1 0	Ilfracombe	add	2 45
Alderney	add	3 15	Jersey	—	3 15
Antwerp	—	1 40	King's Road	—	4 0
Ayr Harbour	sub.	3 45	Kinsale Harbour	—	1 45
Bantry Bay	add	1 0	Leith	—	0 25
Barnstaple	—	2 45	Lerwick Harbour	sub.	5 0
Berwick	—	0 30	Liverpool, floating light off,	—	4 25
Bideford	—	2 45	Ditto; Rock Perch, entrance to,	—	3 49
Blakeney Harbour	—	3 15	Loch Foyle	add	3 15
Blexen	sub.	1 15	Margate	sub.	3 30
Boulogne	—	4 15	Milford Haven	add	2 15
Brest Harbour	add	1 45	Montrose	—	1 15
Brill, the	—	0 15	Morlaix	—	2 30
Buchanness	sub.	2 45	Mount's Bay	—	1 45
Calais	—	3 15	Newhaven	sub.	3 45
Campton	—	3 15	Newport	—	2 30
Cape Clear	add	1 15	New Shoreham Harbour	—	3 25
Cardigan Bar	—	4 30	Nore	—	2 15
Carmarthen Bay	—	3 0	Orfordness	—	4 15
Cherbourg	—	5 0	Peel Harbour, Isle of Man.	—	4 15
Christchurch Harbour	sub.	5 55	Plymouth Sound	add	2 45
Cork Harbour	add	1 45	Pool Harbour	sub.	5 55
Cowes	sub.	4 0	Port Glasgow	—	3 0
Cromarty	—	3 0	Port Patrick	—	3 45
Cuxhaven	—	1 45	Portsmouth	—	3 15
Dartmouth Harbour	add	3 15	Ramsay Har. Isle of Man.	—	4 15
Donegal Bar	—	2 45	Ramsgate Harbour	—	3 25
Douglas Harbour, Isle of Man	sub.	4 15	Rye Harbour	—	4 9
Dover Harbour	—	3 55	Scarborough	add	1 30
Duncansby Head	add	5 30	Scilly Islands	—	1 45
Dundee	—	0 30	Shannon Mouth	—	1 0
Dunkirk	sub.	3 0	Sligo Bay	—	2 30
Exmouth Bar	add	3 15	Southampton	sub.	3 15
Eyder, Mouth of the	sub.	2 45	Spurn Point, the	add	2 30
Eyemouth	add	0 30	St. Ives	—	1 45
Falmouth Harbour	—	2 30	St. Malo	—	3 15
Flushing	sub.	1 45	Stromness	sub.	5 45
Fort George	—	2 45	Sunderland	add	0 15
Galway	add	1 30	Tay bar	sub.	1 0
Glenluce Bay	sub.	3 45	Texel Road	add	5 15
Gravelines	—	3 0	Torbay	—	3 15
Greenock	—	3 0	Tynemouth Bar	—	0 5
Guernsey	add	3 15	Waterford, Hook point of	—	2 45
Hartlepool	—	0 15	Wells Harbour	—	3 15
Havre de Grace	sub.	4 15	West Scheldt	sub.	1 45
Heligoland	—	3 45	Whitby	add	0 45
Helvoet Sluys	—	0 5	Wigton Bay	sub.	3 45
Holyhead Harbour.	—	5 0	Wranger Oog	—	2 45
Horn Point	—	2 45	Yarmouth Road	add	5 30
Hull	add	3 30			

\*\*\* We have given under each month the daily Southing of the Moon, i. e. the time of the Moon passing the Meridian. This is principally useful to Nautical Men to calculate the time of High Water at any given place.

## USEFUL DIRECTIONS FOR EACH MONTH.

## JANUARY.

*Preservation of Health*—Catarrhs, rheumatisms, and all inflammatory diseases, are prevalent in this month: nothing is so likely to produce them as sudden exposure to heat after a person has remained long in the cold air. Cold renders the habit of body more susceptible of impressions; the effect, therefore, of coming into a hot room from cold, is a quickened action of the blood-vessels, which frequently arises to fever and sometimes to inflammation. Running very quick, after having stood shivering in the cold for some time, is likely to produce the same bad effects.

Chilblains are the consequence of deficient energy in the action of the heart, by which the extreme vessels become obstructed, and thence a kind of incipient gangrene or rather tendency to mortification ensues. They are prevented by whatever strengthens the general habit; and by promoting the circulation in the fingers and the feet by friction.

*Management of a Garden and Orchard.*

—All soils intended for the reception of seeds should be properly prepared by careful digging, ridging, &c.; and for those of early frame and Charlton peas, maza-gon, and long-pod beans, radish, and the best sorts of cos-lettuce, the driest, southwardly exposed, and sheltered situations should, in this, and the two following months, be chosen. If any of such seeds have been previously sown, guard the peas and beans by drawing a little earth to each side of the drills, and from mice and jays by traps; and protect radishes and lettuce by coverings of dry fern or straw. Whenever there is frost, it is a great object, that the roots of all vegetables during the winter should be preserved, as much as possible, from wet, for which purpose it is advisable to plant on beds raised above the level of the ground, or on the top of ridges, particularly in wet or clay soils: and when the garden is not already drained, lose no time in making little hollow drains, about nine inches below the soil: the slugs and worms are prejudicial this month: water in which quick-lime is slaked kills worms effectually, and quick lime strewed over the plants destroys slugs.

Pruning may be done from December till the sap rises, but in wall-trees it is best done after the winter, as then you see what has been damaged by the season. Cut close and clean, but cut as little as may be: half the trees are spoiled by pruning. By cutting away the branches, the trees are excited to reproduce them instead of fruit. But it is a main object to thin out the tree in the middle, so that the light and air may be admitted. All dead or cankered wood should, of course, be cut away.

*Management of a Farm.*—During the frosts of this month, carry out faggots, poles, and timber, draw out manure, chalk and marl land. This employs teams which cannot be used for other

farm purposes. In wet weather, storms, or deep snows, sheep should have some hay daily with the turnips; turnips alone are not sufficient; hay is now well bestowed on them; it keeps up strength, and enables them to get through the lambing. Ewes and lambs are often lost by a wrong calculated frugality in this respect. If you fold sheep, choose the most sheltered spots consistently with the plan of the future crops. Ewes and lambs are much injured by too long exposure to severe weather. It is a good plan in very bad weather to bring the sheep into yards, and it is best to separate the strong from the weak. The former drive the latter from their food.

If cows calve this month, contrive to have some cabbages, turnips, swedes, carrots, or other green food besides hay. Hay is the most expensive food in all places; and when given alone is not so productive of milk.

## FEBRUARY.

*Health.*—The generally damp state of the atmosphere in this month renders the habit liable to diseases of checked perspiration; it is, therefore, of great importance to keep up a uniform action of the cutaneous vessels by wearing flannel next the skin, regulating the bowels, and avoiding all sudden alternations of heat and cold.

No person should take medicine in this month without advice.

Croup is not an unfrequent consequence of the cold easterly winds, which sometimes prevail in this month. It runs its course very rapidly: and often requires the most energetic practice of the experienced physician to arrest its tendency to a fatal issue. When medical aid cannot immediately be obtained, an emetic should be given, leeches applied to the throat, and doses of calomel exhibited at intervals till the mouth be affected. The warm bath is useful for allaying irritation and equalizing the distribution of the blood in the system. It should be used till fainting occur. But in this disease, as in all others, we caution parents from any attempt to cure it, without the best professional assistance.

*Garden and Orchard.*—Dig and trench vacant ground. Carry on manure in frosty weather. In the beginning of the month sow succession-crops of the same vegetables recommended to be done in January, bestowing the same care to protect and preserve them. Look over the autumn-planted early cabbage, stir the ground between, fill up any blanks, and draw, on dry days, a little earth to the stems. If a full crop has not been previously planted, now is the time to do this, if the weather permits. Plant them about nine inches apart in the rows: the intermediate ones may be drawn for use as soon as they become crowded. Sow, towards the end of the month, marrowfat peas and the larger sorts of beans; also a little early common and red cabbage, savoys, round spinach, and small salad herbs.

**Farm.**—As very cold weather generally prevails this month, the rules respecting stock still remain applicable as in January.

Plant beans early this month. If possible, finish the planting before the end: later crops do not succeed well. They should be dibbled about three inches apart, and carefully covered with mould, pressed moderately on them.

The common little horse-bean is the best; and more marketable. Growing higher than other sorts, it yields a greater quantity of straw. It grows best on rich, dry, sound loam, but will succeed on turnip loams and middling lands.

Towards the end of the month, part of the turnip land will be ready to be tilled for turnips.

In Suffolk a practice is commenced of putting barley on turnip lands by means of drilling without ploughing. See an account of it in Young's Farmer's Calendar.

Seed of cabbages intended to be planted in June may now be sown on lands which have been prepared by paring and burning the year before, and well manured. Three ounces of seed to each square perch; the best sort, and the hardiest, is the large red.

This is the proper season for sowing black oats and hardy peas. The white boiling pea is more tender than the grey.

Manure grass-lands with soot, coal, and wood-ashes, lime, &c.

Marling may now go on profitably.

## MARCH.

**Health.**—The north-east winds which prevail in March dry the surface of the body, check perspiration, and cause pleurisy, croup, and other pulmonary complaints; they also chap the skin of children, and are extremely detrimental to young infants, who should not be exposed to these winds. Nothing is so injudicious as efforts to harden children by sending them out in cold weather; but in saying this, we think it necessary to recommend the rearing of infants without the use of caps, either at night or in the day. Children so reared never have catarrhs, and escape many other diseases.

**Garden and Orchard.**—This is the busiest month of the year in the kitchen-garden: on the time of sowing, and the perfect manner of committing the seed to the ground, depends almost all the success of exertion, and all the advantages of a garden. Previous care must therefore be given that every part of the garden receive every assistance which labour and manure can supply.

The most useful vegetables to be sown are, any of the best sorts of peas, twice; beans, twice; spinach, radish, and other small salad herbs, thrice. Towards the end of the month, full crops of onions, carrots, parsnips, and leeks, the larger sorts of cabbage, savoy, and red cabbage, if former sowings have failed. Parsley, and all other sorts of pot-herbs which are raised from seed; also cauliflower, Brussels-sprouts, brocoli, and any other of the cabbage tribe which may be locally

suitable or requisite. A first sowing of early Dutch turnip may be put in; also beet and Swedish turnip, (the latter particularly useful to the cottager, if cut into thin slices before they are boiled,) celery on a warm border. A few early potatoes may be put in, small bulbs of last year's crop of onions, shallots, chives, and garlic; sets of horse-radish and Jerusalem artichokes in any corner of the garden. Transplant cabbage, coleworts, lettuce, autumn-sowed onions, and canliffowers: propagate by slips or cuttings the different perennial sorts of culinary or medicinal herbs, as mint, sage, balm and the like.

In the orchard, graft young stocks, or inferior fruit-bearing trees, with new or superior kinds: unprofitable trees may thus be *sooner fruitful* than by rooting up and replanting.

The cottager who amuses himself with flowers, should now sow his sweet peas, sunflower, larkspur, lupins, and ten-week stocks; clean, and refresh with fine mould, auriculas, polyanthus, hepaticas, &c.; and transplant his young pinks and carnations.

**Farm.**—This month sow barley. If all other circumstances are equal, the March will be superior to later sown.

Increase the quantity of seed as the season advances. If three bushels are sown in February, three and a half should be sown the end of March.

Sow white oats. The land should receive the same preparation as for barley.

Clover. There are several methods of sowing this; but the surest is to broadcast, and harrow in at the time the barley is sown. Ten or twelve pounds is the usual quantity of seed, but fifteen are better.

Sow upon light sandy lands trefoil, with a portion of white clover and ray-grass. Six pounds trefoil, four white clover, half a bushel of ray, are the common quantities.

Sow sainfoin. Sows upon chalk are its favourite soils; also loams and clays in a shallow stratum on limestone. No crop is so profitable. Four bushels an acre broadcast; but in parts of Hampshire they sow six or seven bushels.

Sow now all sorts of peas not sown before. Stiff clays do well for the hog-peas, lighter loams for the tenderer.

Tares, if not sown before, should be now sown. If later, the crop suffers.

All stock, ewes, wethers, or lambs, should now be kept well. If pinched now, all money before expended is thrown away.

## APRIL.

**Health.**—It is an old custom to take physic in this month; and it is not without reason: for at this season the influence of spring is felt upon the animal frame, as it is upon the vegetable, although in a less degree; and inflammatory diseases, and cutaneous eruptions show themselves, if the habit of the body be not subdued. For those who are in good health, the best spring physic is that of our grandmothers, sulphur and cream

of tartar. Many persons are in the habit of being bled in this month: it is a custom which rather tends to induce plethora than to subdue it. Bleeding, if resorted to, should be followed by several doses of active purgative medicine.

**Garden and Orchard.**—Earth up peas and other drilled crops, as they advance in growth: stick peas before they require such support; it protects and assists their advancement. Continue to sow successions of peas, common beans, cabbage, savoys, celery, spinach, turnips, onions, lettuce, radish of different sorts, &c., according to the size of the garden, regard being had to whether the spot is to be only a seed-bed or the final station of the plant. Sow the different sorts of brocoli twice in the month, cauliflower once; kidney beans for a first crop, in the last week; also scorzonera, skirrit, and salsafy, if required. Finish planting potatoes. Transplant from the seed-beds lettuce, cauliflower, and any other plants which are capable of and require such treatment. Begin the hoe-culture of killing weeds wherever practicable.

In the orchard, water new-planted trees, and put litter round their roots.

**Farm.**—Barley crops, not sown in March, should be in the ground by the middle of this month.

There should be two sowings of spring tares this month; one at the beginning, the other at the end. Two bushels and a-half per acre.

This is the right season for sowing lucern; sainfoin may also be safely sown.

This month tries the farmer more than any in the year. Pieces of clover and ray-grass grown on land in pretty good heart should succeed as feed for sheep after the turnips; swedes are very useful this month; they should be pulled to prevent their running up to flower, and from becoming fibrous and hard. If pulled, they get mellow, and last, on the ground, good till the end of May. No turnip should be in the ground after March.

Markets for beef and mutton are usually high towards the end of this month. Beasts really fat are sure to sell well at Smithfield.

Do not be anxious to get your cows out of the farm-yard. Swedish turnips and chaff are good food for them. Turning cattle out before there is good bite is unprofitable. They should be well littered both in the yard and house.

The end of this month is the best season for planting potatoes, and for planting the crop of autumn-sown cabbages.

This month must conclude the business of fences; it is bad husbandry to cut hedges after April.

## MAY.

**Health.**—In this month consumptive patients ought to be particularly guarded against exposure to evening air. In the warm days, also, which occasionally intervene during this month, young people are apt to throw off their flannels and winter clothing, and, consequently, rheu-

matism is very prevalent. The management of no formed disease should be undertaken by the unprofessional; but in the country, until proper advice can be procured, much relief may be obtained from taking, at bed-time, one grain of calomel, one quarter of a grain of tartar emetic, or three grains of James's powders, and one and a half grain of opium; and following this with a brisk purgative in the morning. Avoid marshy grounds, which, in this and the next month, exhale a vapour that produces ague.

The change from winter to spring produces a state in the animal frame, which greatly augments any tendency to plethora, or fulness in the blood-vessels, and, therefore, apoplexy shows itself in this month more frequently than at other periods of the year. Every thing depends on prompt professional assistance being obtained; but when this is protracted, much benefit may be derived by dividing or cutting across the arterial branches in the temples by means of a penknife, and encouraging the flow of blood. The bowels should also be freely opened by a glyster, of castor oil, salts, and warm water: or by placing upon the tongue a drop of Croton oil.

**Garden and Orchard.**—In this month continue to sow in succession crops of peas, common beans of all sorts, spinach, and salading: carrots sown at this time will be acceptable, as they are less subject to the worm than earlier sown crops. In the first week sow a full crop of dwarf kidney-beans, and in ten days after, put in the principal crop of runners: these are the most useful, especially in the cottage garden; and are easily transplanted from a seed-bed, if the ground where they are intended to stand for good is not cleared and ready. To make the most of small spots of ground judicious cropping is every thing: every foot of the surface should be yielding or bringing forward successions of produce. Between the rows of cabbage, beans or potatoes may be planted. Between those of peas, any of the cabbage tribe, as savoys, sprouts, brocoli, &c. Such close routine of cropping should be followed by every possessor of a garden.

In the orchard, defend the trees from insects by sprinkling them frequently with soap-suds, salt and water, lime-water, or water impregnated with sulphur, and by dusting them with hot lime.

**Farm.**—About the 12th, the farmer may calculate he will have a sufficient bite of grass to leave off foddering.

Buckwheat may be sown towards the end. It is a profitable crop on all land that requires late sowing.

Lucern may yet be sown; being a perennial, when well cultivated, it gives an immense profit; the land should be rich and fine, and free from weeds.

Potatoes may be planted through the month.

Swedish turnips: the best culture is to sow; where it is to remain, broad-cast, from the 10th to the end.

Hoe beans and pea crops, if drilled,

The drilling of peas on good loams or sands is an excellent practice.

Sheep should close feed the grass. There should be no bents suffered to rise. Experience has taught the fact that the way to have abundance of leaf is to prevent the stems rising at all.

This month begins folding in all England. Many farmers give too slight dressings. The land should be black with manure if arable, with a good covering of grass.

The farmer should now leave off dry meat for horses, and soil them in the stable; food given in the stable goes much farther than in the field, and raises more manure. The best management of horses in Europe is in Flanders; they are all the year in stables.

Mind the dairy diligently this month. It is the most difficult part of farming at this period.

## JUNE.

*Health.*—The directions for May are applicable to this month. Too free a use of raw vegetable matters is apt to bring on attacks of flatulent colic; immediate relief from the pain of which may be obtained from a tea-spoonful of paregoric in a glass of brandy. But when advice can be procured it should be resorted to, as the above anodyne would be highly improper in the event of inflammation of the bowels supervening.

*Garden and Orchard.*—Top peas and beans to assist the filling of the pods. Plant out cucumbers and pumpkins, previously raised from seed, if not done in the preceding month, on pits filled with stable-dung or any green-weeds, as nettles, &c., which will ferment. Both these are useful in cottage cookery, and with an onion and salt make a fine stew—the pumpkin bakes well with a few apples or pears. Sow small portions of cauliflower, cabbage to be used as coleworts, turnip, also carrots and onions to be drawn young. Likewise pearl and Prussian blue peas for late crops; the white-blossomed common bean, and endive near the end of the month: at which time, too, the principal crop of turnips should be sown. Sow kidney-beans for successions. Transplant lettuce, cabbage, savoy, brocoli, and celery. Prick out brocoli, celery, cauliflower, and all other plants which are benefited by standing some time in an intermediate nursery-bed: attend to the necessary business of watering, especially lately planted crops. Thin crops; stick peas; earth up plants in rows; kill weeds and insects.

*Farm.*—Turnips are the soul of the best husbandry. A succession of tares and turnips in the same year may be raised and consumed on dry land, until it is made of any desired degree of richness. Turnips may be sown during the whole of this month.

A second, or even a third, sowing of Swedes should be made, and hoed as soon as they are in rough leaf, if the weather be not too dry. The cultivation in rows

is excellent where the soil permits; but in clayey stony soils does not answer: the system is only calculated for light loams and sands, which yield easily to the plough or horse-hoe.

This month sainfoin, clover, and meadows are cut for hay. In mowing make the labourers cut as close as possible; grass never thrives well that is not cut close, and one inch at bottom weighs more than several at top.

Sheep that are kept in enclosures, and especially in a woodland country, should be examined every day, lest they be fly-struck. In twenty-four hours it may be almost past cure. Melt some butter, and stir in a sufficient quantity of flour of brimstone, until it is of good consistency; a piece of the size of a small walnut is to be rubbed between the hands, and drawn along the back of the sheep.

Maggots should be dislodged with a knife, and a small quantity of white lead scraped from a lump put among the wool, which being shaken, the powder is carried down to the wound.

## JULY.

*Health.*—In those who are corpulent, the perspiration induced in hot weather is apt to cause a miliary eruption on the skin, similar to the prickly heat of hot climates. It is easily moderated by wearing calico next the skin to absorb the acrid perspiration; and by employing a cool regimen and free ventilation, to render the exudation of the skin milder. It is a mistaken notion to suppose that wine and spirits are useful in this state of habit; even a small proportion of these stimulants often produces a deleterious effect. One of the best preventives is a frequent change of linen, and the use of the tepid bath. Take off flannel which has been worn next the skin, in this month; and use, once or twice, the warm bath.

In hot weather, those predisposed to spittings of blood, are in great danger of an attack of that disease. When medical advice is not at hand, it is of importance to know, that the bleeding may be moderated by placing the patient in a sitting position, giving him small doses of ice or iced water, and keeping the trunk of the body as cool as possible, while, at the same time, the extremities are kept warm.

*Garden and Orchard.*—Cut herbs when in flower, and dry them for winter use. Sow small portions of cos-lettuce and endive, York and sugar-loaf cabbage, to be drawn as coleworts in winter and spring. Sow also kidney-beans for a late crop, and towards the end of the month, black-rooted Spanish radish, and common turnip to stand the winter. Now is the time to ridge out celery, to transplant brocoli, savoy, leeks, cabbage, cauliflower, lettuce and endive. If you have not room to ridge out the whole of your celery, dig a broad trench a yard wide, and plant four or five roots in it, and earth up as with the row: this will do well to use for broth, &c. Celery to be good should grow quick, and for that purpose should be kept alive



by wet—it is a water plant. Stick kidney-runners, and should the weather be dry, give them plentiful waterings, as they do not set well without. The cottagers should now be on the alert, to stock every vacant or likely to be soon vacant corner of his ground, with something or other that will come into use in the winter; any of the cabbage tribe will be acceptable, whether grown to their full size or not.

Examine the grafts put in during the spring; disencumber them of clay and bindings, if not done before. See whether any require support against wind.

*Farm.*—This is the time for hand-hoeing turnips. Turnips sowed about twenty-four hours after they are up will be entirely secured against the fly.

If the first and second sowing of turnips have failed, sow cole seed rather than turnips a third time.

Crops of potatoes planted in rows should have a third horse-hoeing this month, or the ground well pulverized by a scarifier, fixed in a heavy iron beam, working under the ridge; afterwards throw up the mould by a double mould-board plough. There is great use in this operation.

Weed well beans this month.

All meadows not cut in June should be now mowed. Haymaking, in many seasons, is ticklish work. It is a material point to have plenty of hands. If good use be not made of favourable days, the work will be unprofitable. In bad weather the men and women may be employed at other work; where many hands are kept this management will save much useless expense.

Have an eye to your fallows this month. Do not suffer them to be over-run with weeds. You farm unprofitably if you do not keep men and horses for all work.

Before this month goes out lambs should be weaned. Clover in blossom is of all food the most forcing, sainfoin Rouen excellent; if the farmer has neither, let him reserve a good bite of fresh grass for them.

Do not let the marl, chalk, clay, or mud carts stop; it is a proper season for the work.

Forward white peas will be fit to cut early this month.

Be very attentive to the wheat crops; they are very liable to the mildew, which admits but of one cure, reaping it as soon as it is struck.

## AUGUST.

*Health.*—One of the best modes of preserving health, and invigorating the constitution against the evils of the approaching winter, is the daily use of the cold bath. In many habits, however, the plunging bath is hurtful, by the absence of that reaction which causes the glow on the skin of those who are benefited by bathing. In these cases, the shower bath is often useful; but, when no reaction even follows its use, the individual should sponge the trunk of the body with cold salt water, or vinegar and water, before rising in the morning, whilst the limbs are kept warm in bed. Tepid water used in this manner,

is tonic or invigorating, if brisk exercise follow its use.

*Garden and Orchard.*—Still a winter supply of turnip may be sown, if former sowings have failed. In the second week, sow winter spinach, and therewith, both cos and cabbage-lettuce. Sow radishes twice in the month; they generally succeed well at this time, and, with the onion, are particularly useful to the cottager during harvest. Sow also Strasburg onion to stand the winter for spring and early summer use. About the beginning of the second week, sow early York cabbage, for the main crop of next year; this crop requires the particular attention of the cottager, as one of the most useful crops of his garden. Sow cauliflower about the 20th of the month for the main crop next year; also parsley and endive.

*Orchard.*—Defend ripe or ripening fruits from birds and insects; gather them with care, as it adds to their value whether for sale or keeping.

*Farm.*—Now the farmer ought to give his first attention to his wheat crops. Bad weather generally injures his profits; he must have many hands at work to make the best use of fine seasons, or he will be called an *afternoon farmer*.

Take care the men do not cut in improper weather, and that they make the sheaves in proportion to the quantity of weeds and ripeness of the corn. They lay the shocks or sheaves in some counties so as to carry off the water. Between Dover and Sandwich they use cloths and mats to cover the sheaves; this practice improves the sample. Each mat costs 7d. Stacking wheat is the best mode of preserving it. It carries a finer countenance out of a stack than out of a barn; the admission of air gives it a brighter colour.

Wheat-stacks should be placed near the end of a barn, and a door or window made to throw in. This saves much labour, and danger from being caught in bad weather.

Of all grain oats take the least damage in bad weather. A shower or two is rather beneficial to them.

The barley crops should generally have good field room, lying five or six days after mowing; a heavy shower will not diminish the farmer's profit; it makes the grain swell and measure more per acre.

Rape seed should be sown the beginning of this month.

The custom of gleaning is universal, but the poor have no right to glean without the permission of the farmer. He should permit it under such rules as prevent abuse: but let him not suffer his pigs or cattle to interfere with the gleaner; such little profits should be allowed the poor.

The second hand-hoeing of broad-cast turnip crops must be now given, and should not be omitted on account of other harvest work.—Sell lambs this month; it is advantageous.

## SEPTEMBER.

*Health.*—The change of the season, and the free use of plums and other stone-

fruit in this month, render cholera and diarrhoeas frequent. When these complaints occur, the best medical advice should be speedily procured; but it may be useful to know that much of the mischief is caused by the skins of the fruit alluded to, which, being insoluble in the stomach, and astringent, become acrid and stimulant, producing spasm and the colic pains which accompany these diarrhoeas. No stone-fruit, which is not fully ripened, and the flesh of which is not a soft, juicy pulp, is wholesome. Until medical advice can be procured, give to an adult a table-spoonful of castor oil and a tea-spoonful of paregoric.

*Garden and Orchard.*—In this month, the clearing off the early, and judicious management of the late crops, forms the principal business of the gardener. Radishes may still be sown; also prickly spinach for spring use. Continue to transplant savoys, Jerusalem kale, and any others of this tribe which have a chance of succeeding. The growing crops of broccoli, cauliflower, runners, and all others in progress, should have every assistance from the hoe and watering-pot. Prepare a rich open spot, on which to prick out the cabbage-plants of last month's sowing, for the principal crop of next year; and look forward to dress and prepare a suitable quarter for their final station. Prick out also, on dry and sheltered spots where they may occasionally be covered, young cauliflower and lettuce. Earth up celery, and other crops: take up potatoes, if ready.

*Farm.*—The cultivation of tares is extending every year. They make, with turnip crops, the arable farms support as much stock as the grazier. During the time they occupy the ground, they produce as much green food as the grazing land.

Immediately after the corn is carried, or even partly carried, plough the field and sow tares, and where no manure is used, in some soils the seed may be harrowed in without ploughing. Mowing the tares and feeding the sheep in cribs with them on the land is a good method.

Tares may be made into hay; they become then about one quarter their former weight; but wet weather soon spoils them; and sheep are not very fond of them in the shape of hay.

Upon all cold, wet, and backward soils, September is the best season for putting in wheat, provided the land be not too dry. Upon drier and warmer soils, it is better to postpone it to October.

The red lammas wheat, red straw, or red ear, is reckoned by many farmers the best of all the sorts hitherto known, yielding the finest and whitest flour.

Velvet wheat yields also much white flour, is thin skinned, less subject to mildew and blight than other wheat, as the downy hull appears to protect it. It is grown much in the Isle of Thanet, on the sea-coast.

Steeping the seed in a solution of arsenic is certain to give clean crops from smutty seed.

Beans, if well cultivated, form a tolerable preparation for wheat. Clover forms so good a preparation for wheat, as to yield ample crops of this grain at very little expense.

You must now be very attentive to your fattening beasts: a beast nearly fat must have plenty; he is nice, and, if at all curtailed in pasture, will fall off. It is excellent management to have August cabbages for the fat beasts; grass declines after this month.

The dairy cows must have plenty of grass. Lucern mown and given them in the yard is excellent.

## OCTOBER.

*Health.*—Those who are liable to attacks of leprosy, moist tetter, and several other skin diseases, generally experience a return of them in this month. They are best guarded against by the use of the tepid bath, friction on the skin, and the regulation of the bowels, carefully avoiding sweet and acedent articles of diet.

*Garden and Orchard.*—In this month it is usual to begin sowing Charlton peas and mazagon beans. If they stand the winter, they yield their produce a week earlier than spring-sown crops; but the success is uncertain; and, therefore, should only be attempted where disappointment is no loss. Planting the earliest cabbage in their final situation, is the most important part of this month's business, and every care should be taken that it be efficiently done. The ordinary occupations of September must be continued throughout this month; and, in addition, shallots and garlic, where wanted, should be set to remain for next year's increase. Seed onions may also be planted.

*Farm.*—At this season farms are taken. Do not be captivated by seeing large crops on the land; examine well, at the same time, by what expenses they are raised.

Pent-bog and fen are often profitable; but the expenses of improvement demand a calculating head.

Soils formed by water are among the richest that are to be found.

Grass fields on gravelly soils, if the gravel be sharp, are apt to burn in dry summers; but they give great and sweet crops in wet ones.

Contiguity of fields is of great importance: many farmers overlook this circumstance. Straggling, disjointed fields are most perplexing, and a great drawback on profitable management.

This may be the last month of cattle remaining abroad; and if so, the farmyard should be in order to receive them. In hiring a farm, a man should attend much to the goodness and convenience of the yards.

About the latter end of this month the horses must be put to dry meat, hay, oats, and chaff. If the horses are worked constantly, they should be allowed two bushels of oats per week. The Flemish give no water to their horses without making it a whitesoup by the addition of

meal of corn of low price. No horses in Europe are better managed.

In stocking a farm, it is often a question whether to employ horses or oxen. In counties which do not possess a breed of horned cattle, and have no land for fattening, it will not answer to employ oxen.

The dairy cows must now be taken into the yard, and their food varied according to their state.

Take the large fattening oxen and put them on turnips, potatoes, cabbages, or carrots.

Put full-grown hogs to fatten.

This is the best season for manuring grass-land. Take up potatoes; they cannot endure frost.

## NOVEMBER.

*Health.*—This is the period of the year in which coughs, consumptions, rheumatisms, and a numerous train of complaints fix themselves in the habit. Much of the evil proceeds from exposure to sudden alternations of heat and cold, which should, therefore, be carefully avoided. The body must now be encased in flannel; and those susceptible of diseases of the lungs should always put a portion of gum, or some simple lozenge, into the mouth, when they expose themselves to the night air, and in foggy weather. Consumptive patients should be already on the sea; migrating, like the swallow, to a more genial climate for the winter months. Ulcers which have long been open, must not be healed up in this month, unless their place be supplied by an artificial issue, or a seton.

*Garden and Orchard.*—The chief business of this month is defending the standing crops from the rigours of the approaching winter. Brocoli, especially those kinds which rise high from the ground, should be laid down, their heads pointing to the north. Michaelmas cauliflowers should be saved from the frost, being pulled up when dry, and hung up "by the heels" in a shed or cellar. Peas and beans, if peeping through the surface, must be guarded from jays and mice; and all tender vegetables preserved by coverings.

In the orchard, fruit-trees may be transplanted, pruned, and the soil improved by applications of manure.

*Farm.*—This is the first month for hedging and ditching: October is too soon.

In this month you begin to water the meadows and pastures, where it can be done; no improvement will pay better.

All this month, carts should be employed carrying marl, chalk, or clay, upon soils light enough to admit carting.

Upon dry soils, which plough well, this month is a good time to sow the hardy hog-peas.

The stock of lean sheep may still be kept on the remains of the summer grass; but the fat stock must now be served with turnips or cabbages. Remember that fattening cattle, of whatever sort, should have as much feed as they like, but should be prevented making waste.

There is no doubt that salt may be used

in such a manner as to preserve the health of sound sheep, as well as to cure such as are rotten; it may be given in their chaff of cut hay and straw, or other meat, in a trough; or you may drench them with brine of a proper strength. Most persons prefer the former mode.

The black scour, or other diarrhoea in sheep, may be cured by giving salt.

Now begins the business of wood-cutting.

Drilled Swedes should now be covered with mould. It preserves them from frosts, from hares, rooks, wood-pigeons, and other animals. It may be done with a light double-mould-board plough. In spring, when wanted for sheep, a harrow will uncover them.

## DECEMBER.

*Health.*—The convivial meetings, and the heated rooms consequent upon them, are the sources of many diseases in this month. Warm clothing, temperance, and regular hours, are, therefore, essential.

*Garden and Orchard.*—Should the weather be open, sow another row or two of Charlton peas, and of mazagon, or early long-pod beans. Continue all practicable means of protection. This season of the year, however, is more suited to thought and reflection, than to the action of the owner of a small garden: let him, therefore, resolve on his plans of next year's operations; learn to prefer the vegetables most useful and most suitable for his soil and situation, and make all necessary preparations accordingly.

*Farm.*—Threshers must be kept constantly at work this month, that the cattle may be fed with straw chaff. Use the worst straw first; every change of straw should be for the better. Wheat straw makes the worst fodder; oat comes next; barley the best. Do not be without a threshing machine, if you can afford it.

Pigs should be well littered; they make the best manure on the farm. In the management of store swine, oats are preferable to barley. Young pigs require warm meat to make them grow.

Keep the hedgers and ditchers close to work this month, that they may be ready for other business in the spring.

Sheep that have been reared and constantly fed on chalk hills, are free from the rot as long as they continue in that situation. Sheep may be cured of the rot by management or medicine.

Winter them in straw yards, where they have sheds to keep them dry.

The disease of the rot is similar to dropsy; too much abundance of water. An eminent farmer recommends the following method of cure:—

Fast the rotten sheep one night; then take one table-spoonful of oil of turpentine and two ditto of soft water cold, mix it thin, and give the mixture to each sheep at one dose. Then keep the sheep on dry food three or four days; at the end of that time repeat the dose, and continue them on dry food about nine days longer. At the end of this time they may be permitted to join the flock.

# MISCELLANEOUS REGISTER\*.

## I. GOVERNMENT AND LEGISLATION.

### THE ROYAL FAMILY OF GREAT BRITAIN.

#### THE KING.

GEORGE IV., born Aug. 12, 1762; succeeded his Father, King George III., Jan. 29, 1820; married April 8, 1795, to CAROLINE AMELIA ELIZABETH, daughter of the Duke of Brunswick, born May 17, 1768; she died Aug. 7, 1821.

#### Royal Princes and Princesses.

- William Henry, Duke of Clarence, born August 21, 1765; married July 11, 1818, to Adelaide Amelia Louisa Teresa Caroline, sister of the reigning Duke of Saxe-Meiningen, born August 13, 1792.

Augusta Sophia, born Nov. 8, 1768.

Elizabeth, born May 22, 1770; married April 7, 1818, to Frederick Joseph Lewis, Landgrave of Hesse-Homburg, born July 30, 1769.

Ernest Augustus, Duke of Cumberland, born June 5, 1771; married May 29, 1815, Frederica Sophia Carolina, daughter of the Duke of Mecklenburg Strelitz, and widow of Fred. William, Prince of Salms Braunfels, born March 2, 1778. *Issue*, George Frederick, born May 27, 1819.

Augustus Frederick, Duke of Sussex, born January 27, 1773.

Adolphus Frederick, Duke of Cambridge, born February 24, 1774; married May 7, 1818, to Augusta Wilhelmina Louisa, niece of the Landgrave of Hesse; born July 25, 1797. *Issue*, George William, March 26, 1819, Augusta Caroline, July 19, 1822.

Mary, Duchess of Gloucester, born April 25, 1776.

Sophia, born November 3, 1777.

#### Cousins to His Majesty.

Princess Sophia Matilda, of Gloucester, born May 29, 1773.

Prince William Frederick, Duke of Gloucester (her brother), born Jan 15, 1776; married July 22, 1816, to the Princess Mary.

#### Present Order of Succession to the Crown.

1. Duke of Clarence, presumptive heir (as above).

2. Alexandrina Victoria, issue of the late Duke of Kent, (who was next in succession to the Duke of Clarence) born May 24, 1819.

#### Related by Marriage.

Prince Leopold of Saxe-Coburg, married May 2, 1816, to the late daughter of his Majesty, who died November 6, 1817.

Duchess of Kent (widow of his Majesty's late third brother) Victoria Maria Louisa (Princess Dowager of Leiningen), sister of the Duke of Saxe-Coburg, b. Aug. 17, 1736.

### OFFICERS OF STATE.

#### MINISTRY OF ENGLAND.

Lord President of the Council, Earl Bathurst, K.G.

Lord High Chancellor, Lord Lyndhurst

Lord Privy Seal,

First Lord of the Treasury (Pr. Minister), Duke of Wellington, K.G.

Chancellor of the Exchequer, Right Hon. Henry Goulburn

Secretary of State, Home Affairs, Rt. Hon. Robert Peel

Secretary of State, Foreign Affairs, Earl of Aberdeen, K.T.

Secretary of State, Colonies, Right Hon. General Sir George Murray, G.C.B.

President of the Board of Control, Lord Ellenborough

Treasurer of the Navy, and President of Board of Trade, Rt. Hon. Wm. Vesey Fitzgerald.

Master of the Mint, Rt. Hon. J. C. Herries  
First Lord of the Admiralty, Vis. Melville  
[The above form the Cabinet.]

Chancellor of the Duchy of Lancaster, Right Hon. Charles Arbuthnot

Secretary at War, Rt. Hon. Sir H. Hardinge

Commander of the Forces, Lord Hill

Master-General of the Ordnance, Viscount Beresford

Paymaster-General, Rt. Hon. John Calcraft  
First Commissioner of Land Revenue, Viscount Lowther,

Postmaster-General, Duke of Manchester  
Lieut.-Gen. of Ordnance, Sir W. H. Clinton

Joint Secretaries of Treasury, Jos. Planta, Geo. Rt. Dawson, Esqs.

Vice-Pres. of the Board of Trade, T. P. Courtenay, Esq.

Attorney-General, Sir Chas. Wetherell, knt.

Solicitor-General, Sir N. C. Tindal, knt.

#### CHIEF OFFICERS OF THE KING'S HOUSEHOLD.

Great Chamberlain of England, Baroness D'Eresby, and March. of Cholmondeley

Deputy, Lord Gwydyr

Sec. W. D. Fellowes, esq.

Lord Chamberlain, Duke of Montrose, K.G.

Sec. J. Calvert, esq.

Vice-Chamb. Rt. Hon. Sir S. Hulse

Master of Horse, Duke of Leeds, K.G.

Chief Equerry and Ch. Marshal, Lient.

Gen. Sir F. T. Hammond

Groom of Stole, Marquis of Winchester

Mas. of Stag Hounds, Lord Maryborough

Grand Falconer, Duke of St. Alban's, K.G.

Lord High Almoner, Archbishop of York

Grand Almoner, Marquis of Exeter

Sub. Almon. Rev. Ed. Goodenough

Lord Steward, Marquis of Conyngham

Treas. Rt. Hon. Sir W. H. Freemantle

Comp. Lord Geo. Thomas Beresford

Deputy, Tim. Brent, esq.

\* These Returns are corrected up to the 1st of November 1828.

*Mas. of Robes*, Earl of Mountcharles  
*Groom and Clerk*, Tim. Brent, esq.  
*Mas. of Household*, Sir F. B. Watson  
*Poet Laureat*, Robert Southey, esq. LL.D.  
*Mas. of Ceremonies*, Sir R. Chester  
*Assistant and Marshal*, T. S. Hyde, esq.  
*K. Marshal*, Sir C. Mont. Lamb  
*Privy Purse*, Sir Wm. Knighton, bart.  
*Secretary*, Thos. Marrabbe, esq.  
*Lords of the Bedchamber*.—Marquis of

Headfort, Earl of Chesterfield, Lord  
 Glenlyon, Viscount Petersham, Viscount  
 Lake, Earl of Fife, Earl of Warwick,  
 Lord St. Helens, Lord Lovaine, Earl of  
 Roden, Lord Strathaven, Lord Clinton.  
*Physicians to his Majesty*.—Sir Gilbert  
 Blane, Bt. M.D. Sir Henry Hallford, Bt.  
 M.D. Sir Matthew John Tierney, Bt.  
 M.D. Henry Southey, M.D.  
*Phys. for Scotland*.—J. Abercrombie, M.D.

THE HOUSE OF PEERS.

\* \* The titles here given are those by which the noblemen sit in the House of Peers.

*Speaker*, The Lord High Chan. Lyndhurst.—*Chairman of Comm.*, E. of Shaftesbury.

Princes of the Blood Royal . . . . .	5	Peers of Scotland (elected 13th of	
Dukes . . . . .	19	July, 1826) . . . . .	16
Marquesses . . . . .	18	Peers of Ireland (elected for life) . . . . .	23
Earls . . . . .	105	Archbishops and Bishops . . . . .	25
Viscounts . . . . .	22	Irish Represen. Bps. for last Sess. . . . .	4
Barons . . . . .	160		—403

\* Marked thus are Scotch Peers.  
 o Irish Peers.

a Marked thus are Scotch Represen. Peers.  
 b Irish Represen. Peers.

Abercorn, *Marq. of*, 1790,  
 Hamilton, \* o  
 Abercrombie, *Lord*, 1801,  
 Abercrombie  
 Abervenny, *E. of*, 1784,  
 Neville  
 Abingdon, *E. of*, 1682, Bertie  
 Ailesbury, *M. of*, 1821, Bruce  
 Ailsa, *L.* 1806 (\* Cassilis, *E.*)  
 Albemarle, *Earl of*, 1696,  
 Keppel  
 Alvanley, *Ld.* 1801, Arden  
 Amherst, *Earl*, 1826  
 Anglesea, *M. of*, 1815, Paget  
 Anson, *Viscount*, 1806  
 Arbutnot, *Viscount*, 1641 \*  
 Arden, *Lord*, 1802, Perceval  
 Ardrossan, *L.* 1806 (\*Eglin-  
 ton, *E.*)  
 Arundel, *Lord* 1605  
 Ashburnham, *Earl of*, 1730  
 Auckland, *Ld.* 1793, Eden o  
 Audley, *Ld.* 1296, Tuchet  
 Aylesford, *E. of*, 1714, Fynch  
 Bagot, *Lord*, 1780  
 Bandon, *Earl of*, 1800, Ber-  
 nard, b  
 Bangor, *B. of*, 1809, H. W.  
 Majeodie  
 Barham, *Lord*, 1805, Noel  
 Bath, *Mar. of*, 1793, Thynne  
 Bath and Wells, *Bishop of*,  
 1824, George H. Law  
 Bathurst, *Earl*, 1772  
 Bayning, *Ld.* 1797, Powlett  
 Beauchamp, *E.* 1815, Lygon  
 Beaufort, *Duke of*, 1682,  
 Somerset  
 Bedford, *D. of*, 1694, Russell  
 Belhaven, *Lord* 1647, Ham-  
 milton, a  
 Belmore, *E. of*, 1797, Corry, b  
 Beresford, *Viscount*, 1823  
 Berkeley, *Earl of*, 1679  
 Berwick, *Ld.* 1784, Hill  
 Beverley, *E. of*, 1790, Percy  
 Bexley, *Ld.* 1823, Vansittart  
 Blesington, *Earl of*, 1816,  
 Gardiner, b  
 Bolingbroke, *V.* 1712, St. John

Bolton, *Ld.* 1797, Powlett  
 Boston, *Lord*, 1761, Saby  
 Boyle, *L.* 1711 (o Cork, *E.*)  
 Bradford, *Earl of*, 1815,  
 Bridgman  
 Brandon, *D.* 1711 (\* Hamil-  
 ton, *D.*)  
 Braybrooke, *Ld.* 1788, Griffin  
 Breadalbane, *Lord*, 1806,  
 Campbell\*  
 Bridgewater, *Earl of*, 1617,  
 Egerton  
 Bristol, *Bp. of*, 1827, Robt.  
 Gray  
 Bristol, *M. of*, 1826, Hervey  
 Broderick, *L.* 1796 (o Mid-  
 dleton, *V.*)  
 Brownlow, *Earl*, 1815, Cost  
 Buckingham, *Duke of*, 1822,  
 Chandos Temple, o  
 Buckinghamshire, *Earl of*,  
 1746, Hampden  
 Bute, *Mar. of*, 1796, Stuart\*  
 Byron, *Lord*, 1643  
 Cadogan, *Earl*, 1800  
 Caledon, *Earl of*, 1800,  
 Alexander, b  
 Calthorpe, *Lord*, 1796  
 Cambridge, *Duke of*, 1801,  
 Prince Adolphus-Frederic  
 Camden, *Mar.* 1812, Pratt  
 Canterbury, *Abp. of*, 1828,  
 Right Hon. W. Howley  
 Carbery, *Ld.* 1715, Freke, b  
 Cardigan, *Earl of*, 1661,  
 Brudenell  
 Carleton, *Ld.* 1786 (o Shan-  
 non, *E.*)  
 Carlisle, *Bishop of*, 1827,  
 Hon. Hugh Percy  
 Carlisle, *E. of*, 1661 Howard  
 Carmarvon, *Earl of*, 1793,  
 Herbert  
 Carrick, *E. of*, 1748, Butler, b  
 Carrington, *L.* 1797, Smith, o  
 Carteret, *Ld.* 1784, Thynne  
 Carysfort, *L.* 1801, Proby, o  
 Cathcart, *Earl* 1814\*  
 Cawdor, *Earl of*, 1827,  
 Campbell\*

Charlemont, *Earl of*, 1763,  
 Caulfield, b  
 Charleville, *E. of*, 1806, Bury  
 Chatham, *Earl of*, 1766, Pitt  
 Chester, *Bishop of*, 1824,  
 J. B. Sumner  
 Chestersfield, *Earl of*, 1628,  
 Stanhope  
 Chichester, *Bishop of*, 1824,  
 R. J. Carr  
 Chichester, *Earl of*, 1801,  
 Pelham  
 Cholmondeley, *M. of*, 1815, o  
 Churchill, *Ld.* 1815, Spencer  
 Clancarty, *V.* 1923, Trench, o  
 Clanbrassil, *Lord*, 1821, (o  
 Roden, *E.*)  
 Clanwilliam, *L.* 1828, Meade,  
 Clarence, *D. of*, 1789, Prince-  
 Wm. Henry  
 Clarendon, *Earl of*, 1776,  
 Villiers  
 Cleveland, *M. of*, 1827, Vane  
 Clifford, *Ld.* 1672  
 Clifton, *Lord*, 1603 (o Darn-  
 ley, *E.*)  
 Clinton, *Ld.* 1298, Trefusis  
 Clonfert, *Bishop of*, Chris-  
 topher Butson, b  
 Colchester, *Ld.* 1817, Abbot  
 Colville, *Ld.* 1609, a  
 Combermere, *V.* 1825, Cotton  
 Conyngham, *Marq.* 1821, o  
 Cornwallis, *E.* 1753, Mann  
 Coventry, *Earl of*, 1697  
 Courtenay, *Viscount*, 1762  
 Cowper, *E.* 1718  
 Craven, *E.* 1891  
 Crewe, *Lord*, 1806  
 Cumberland, *Duke of*, 1799,  
 Prince Ernest  
 Dacre, *Lord*, 1307, Brand  
 Dalhousie, *L.* 1815, Ramsay,\*  
 Dawnay, *L.* 1796 (o Down, *V.*)  
 Dartmouth, *E. of*, 1711, Legge  
 De Clifford, *Ld.* 1269  
 De Dunstanville, *Ld.* 1796,  
 Basset  
 Delamere, *Ld.* 1821, Chol-  
 mondeley

- Delawarr, *E.* 1761, West  
 De la Zouch, *Lord*, 1308,  
     Bisshopp  
 Denbigh, *E. of*, 1622, Fielding  
 Derby, *E. of*, 1485, Stanley  
 De Tabley, *L.* 1826, Leicester  
 Devonshire, *Duke of*, 1694,  
     Cavendish  
 Digby, *Earl*, 1790, o  
 Doncaster, *E.* 1662 (\*Buc-  
     clough, *D.*)  
 Dorchester, *L.* 1786, Carleton  
 Dormer, *Ld.* 1615  
 Dorset, *D. of*, 1720, Germaine  
 Douglas, *Ld.* 1790  
 Ducie, *Ld.* 1763, Moreton  
 Dudley, *E. of*, 1827, Ward  
 Dufferin, *L.* 1800, Blackwood  
 Duncan, *V.* 1797, Haldane, b  
 Dundas, *Lord*, 1794  
 Durham, *Bp. of*, 1826, Van  
     Mildart  
 Durham, *Ld.* 1827, Lambton  
 Dynevor, *Ld.* 1780, Rice  
 Egremont, *Earl of*, 1749,  
     Wyndham  
 Eldon, *Earl of*, 1821, Scott  
 Elgin, *E. of*, 1633, Bruce, a  
 Ellenborough, *Ld.* 1802, Law  
 Ely, *Bp. of*, 1812, Sparke  
 Enniskillen, *Earl of*, 1815,  
     Cole, o  
 Erne, *E. of*, 1789, Creighton, b  
 Errol, *E. of*, 1452, Hay, a  
 Erskine, *Ld.* 1806, David M.  
 Essex, *Earl of*, 1661, G. C.  
     Connigsby  
 Exeter, *Bp. of*, 1820, Carey  
 Exeter, *Mar. of*, 1801, Cecil  
 Exmouth, *Vis.* 1816, Pellew  
 Falmonth, *Earl of*, 1821,  
     Boscawen  
 Farnborough, *L.* 1826, Long  
 Farnham, *L.* 1756, Maxwell, b  
 Ferrers, *Earl*, 1711, Sherley  
 Feversham, *L.* 1826, Dun-  
     combe  
 Fisherwick, *L.* 1796 (o Do-  
     negal, *M.*) [E.]  
 Fitzgibbon, *L.* 1799 (o Clare,  
 Fife, *L.* 1827 (o Fife, *E.*)  
 Fitzwilliam, *E.* 1746, o  
 Foley, *Lord*, 1776  
 Forbes, *Lord*, 1440  
 Forester, *Lord*, 1821  
 Fortescue, *Earl*, 1789  
 Gage, *Lord*, 1790  
 Gambier, *Lord*, 1807  
 Gardner, *Ld.* 1806  
 Gifford, *Ld.* 1824  
 Glenlyon, *Ld.* 1821, Murray  
 Gloucester, *Bp. of*, 1824,  
     Christ. Bethel  
 Gloucester, *Duke of*, 1764,  
     Prince Wm. Frederick  
 Goderich, *V.* 1827, Robinson  
 Gordon, *Vis.* 1814 (\*Aber-  
     deen, *E.*)  
 Gort, *Vis.* 1816, Vereker, b  
 Gosford, *E. of*, 1806, Ache-  
     son, b  
 Gower, *L.* 1703  
 Grafton, *D. of*, 1765, Fitzroy  
 Graham, *E.* 1772 (\*Mont-  
     rose, *D.*)  
 Granard, *Lord*, 1806, Forbes  
 Grantham, *L.* 1761, Robinson  
 Grantley, *Ld.* 1782, Norton  
 Granville, *Vis.* 1815, Gower  
 Gray, *Lord*, 1445\*  
 Grenville, *Ld.* 1790  
 Grey, *Earl*, 1806  
 Grosvenor, *Earl*, 1784  
 Guilford, *E. of*, 1752, North  
 Gwydyr, *Ld.* 1796, Burrell  
 Harborough, *Earl of*, 1719,  
     Sherard, o  
 Harcourt, *Earl*, 1749  
 Hardwicke, *Earl of*, 1754,  
     Yorke  
 Harewood, *Earl of*, 1812,  
     Lascelles  
 Harrington, *Earl of*, 1741,  
     Stanhope  
 Harris, *Lord*, 1815  
 Harrowby, *Earl of*, 1809,  
     Ryder  
 Hastings, *Marq. of*, 1816, o  
 Hawk, *Lord*, 1776  
 Hay, *L.* 1711 (\*Kinnoul, *E.*)  
 Headfort, *Marq. of*, 1800,  
     Taylor, b  
 Hereford, *Bishop of*, 1815,  
     G. I. Huntingford  
 Hereford, *V.* 1549, Devereux  
 Hertford, *Marq. of*, 1793,  
     Conway, o  
 Heytesbury, *L.* 1828, A'Court  
 Hill, *Lord*, 1814  
 Hillsborough, *Earl of*, 1772  
     (o Downshire, *M.*)  
 Holland, *Lord*, 1762, Fox  
 Home, *E. of*, 1605, Ramey\*  
 Hood, *V.* 1796  
 Hopetoun, *Ld.* 1809, Hope\*  
 Howard, *Lord*, 1553  
 Howard de Walden, *Lord*,  
     1597, Ellis  
 Howe, *Earl* 1821  
 Huntingdon, *Earl of*, 1529,  
     Hastings  
 Hutchinson, *V.* 1821 (o Do-  
     noughmore, *E.*)  
 Ilchester, *Earl of*, 1756,  
     Strangways  
 Jersey, *E. of*, 1697, Villiers, o  
 Kenyon, *Lord*, 1788  
 Ker, *L.* 1821 (\*Lothian, *M.*)  
 Killala, *Bp. of*, James Ver-  
     schoyle  
 King, *Lord*, 1725  
 Kingston, *Ld.* 1821, King  
 Lake, *Vis.* 1807  
 Landaff, *Bp. of*, 1827, E.  
     Copleston  
 Lansdowne, *Mar. of*, 1784,  
     Petty, o  
 Lauderdale, *L.* 1806 (\*Lan-  
     derdale, *E.*)  
 Le Despencer, *Lord*, 1269,  
     Stapleton  
 Leeds, *D. of*, 1694, Osborne  
 Leinster, *Vis.* 1746, Fitz-  
     gerald, o  
 Lichfield, *Bishop of*, 1824  
     Hon. H. Ryder  
 Lilford, *Lord*, 1797, Powis  
 Limerick, *E. of*, 1815, Pery, o  
 Lincoln, *Bp. of*, 1827, J. Kaye  
 Lindsey, *E. of*, 1626, Bertie  
 Liverpool, *Earl of*, 1796,  
     Jenkinson  
 Loftus, *L.* 1801 (o Ely, *M.*)  
 London, *Bp. of*, 1828, C. J.  
     Blomfield  
 Longford, *Earl of*, 1821, Pa-  
     kenham  
 Lonsdale, *Earl of*, 1807,  
     Lowther  
 Lorton, *Vis.* 1806, King, b  
 Lovel, *L.* 1762 (o Egmont, *E.*)  
 Lucan, *E. of*, 1795, Bingham, b  
 Lyndhurst, *Ld.* 1827, Copley  
 Lynedoch, *Ld.* 1814, Graham  
 Lyttelton, *Lord*, 1794  
 Macclesfield, *Earl of*, 1721,  
     Parker  
 Malmesbury, *Earl of*, 1800,  
     Harris  
 Manchester, *Duke of*, 1719,  
     Montagu  
 Manners, *Ld.* 1807, Sutton  
 Mansfield, *Earl of*, 1792,  
     Murray\*  
 Manvers, *E.* 1806, Pierrepont  
 Marlborough, *Duke of*, 1702,  
     Churchill  
 Maryborough, *L.* 1821, Polo  
 Maynard, *Viscount*, 1766  
 Mayo, *E. of*, 1785, Bourke, b  
 Melbourne, *Ld.* 1815, Lamb, o  
 Meldrum, *Lord*, 1815,  
     (\*Aboyné, *E.*)  
 Melrose, *Lord*, 1827 (\*Had-  
     dington, *E.*)  
 Melville, *Vis.* 1802, Dundas  
 Mendip, *L.* 1794 (o Clifden, *V.*)  
 Middleton, *Lord*, 1712, Wil-  
     loughby  
 Minto, *E. of*, 1813, Kynyn-  
     mound  
 Monson, *Lord*, 1728  
 Montagu, *Ld.* 1786, Scot  
 Montford, *L.* 1741, Bromley  
 Moore, *Lord*, 1801 (o Drog-  
     heda, *M.*)  
 Morley, *E. of*, 1815, Parker  
 Morton, *E. of*, 1457, Douglas, a  
 Mount-Cashel, *E. of*, 1781,  
     Moore, b  
 Mounteagle, *Lord*, 1806  
     (o Sligo, *M.*)  
 Mount-Edgcumbe, *E.* 1789  
 Mulgrave, *Earl of*, 1812,  
     Phipps, o  
 Napier, *Lord*, 1627  
 Nelson, *Earl*, 1805  
 Newcastle, *Duke of*, 1756,  
     H. P. Clinton  
 Norfolk, *D. of*, 1483, Howard  
 Northampton, *Mar. of*, 1812,  
     Compton  
 Northland, *V.* 1826, Knox, b  
 Northumberland, *Duke of*,  
     1766, Percy  
 Northwick, *L.* 1797, Rushout

- Norwich, *Bp. of*, 1805, H. Bathurst [don, D.)  
 Norwich, *E. of*, 1784 (\*Gor-  
 O'Neill, *E. of*, 1800, b  
 Onslow, *Earl*, 1801  
 Orford, *E. of*, 1806, Walpole  
 Oriol, *Lord*, 1821, Foster  
 Ormonde, *L. of*, 1821 (o Or-  
 monde, M.)  
 Ossory, *B. of*, R. Fowler  
 Oxford, *B. of*, 1827, Chaz.  
 Lloyd  
 Oxford, *E. of*, 1711, Harley  
 Pembroke, *Earl of*, 1551,  
 Herbert  
 Peterborough, *Bp. of*, 1819,  
 Herbert Marsh  
 Petre, *Lord*, 1603  
 Plunket, *Lord*, 1827  
 Plymouth, *Earl of*, 1682,  
 Windsor  
 Pomfret, *E. of*, 1791, Fermor  
 Ponsonby, *L. of*, 1749 (o Bes-  
 borough, E.)  
 Ponsonby, *Lord*, 1806  
 Portland, *Duke of*, 1716,  
 Bentinck [Wallop  
 Portsmouth, *Earl of*, 1743,  
 Ponlett, *Earl*, 1706  
 Powis, *Earl of*, 1804, Clive  
 Prudhoe, *Ld.*, 1816, Percy  
 Queensbury, *Mur. of*, 1682,  
 Douglas, a  
 Radnor, *E. of*, 1765, Bouverie  
 Ravensworth, *Lord*, 1821,  
 Liddell  
 Redesdale, *Ld.*, 1802, Mitford  
 Ribblesdale, *Ld.*, 1797, Lister  
 Richmond, *Duke of*, 1675,  
 Lennox<sup>2</sup>  
 Rivers, *Lord*, 1776, Pitt  
 Rochester, *Bp. of*, 1827, G.  
 Murray [Zulestein  
 Rochford, *Earl of*, 1695, De  
 Rodney, *Lord*, 1782  
 Rolle, *Lord*, 1796  
 Romney, *Earl of*, 1801,  
 Marsham  
 Ross, *L. of*, 1815 (Glasgow, E.)  
 Rosse, *E. of*, 1806, Parsons, b  
 Rosebery, *L.*, 1828, Primrose\*  
 Rosslyn, *E. of*, 1801, Erskine  
 Rutland, *D. of*, 1703, Manners  
 St. Alban's, *Duke of*, 1683,  
 Beaucherk  
 St. Asaph, *Bishop of*, 1815,  
 John Luxmoore  
 St. David's, *Bishop of*, 1825,  
 J. B. Jenkinson  
 St. Germans, *Earl of*, 1815,  
 Eliot [herbert  
 St. Helens, *Lord*, 1801, Fitz-  
 St. John, *Ld.*, 1558  
 St. Vincent, *Vis.*, 1801, Jervis  
 Salisbury, *Bp. of*, 1825, T.  
 Burgess  
 Salisbury, *M. of*, 1789, Cecil  
 Saltersford, *Lord*, 1796 (o  
 Courtown, E.)  
 Saltoun, *L.*, 1445, Fraser, a  
 Sandwich, *Earl of*, 1660,  
 Montagu [Fiennes  
 Saye-and-Sele, *Lord*, 1603,  
 Scarborough, *Earl of*, 1690,  
 Saunderson, o  
 Scarsdale, *Ld.*, 1761, Curzon  
 Seaford, *Lord*, 1826, Ellis  
 Selsey, *Lord*, 1794, Peachey  
 Shaftesbury, *Earl of*, 1672,  
 Cooper [field, E.)  
 Sheffield, *L.*, 1802 (o Shef-  
 Sherborne, *Ld.*, 1784, Dutton  
 Shrewsbury, *Earl of*, 1442,  
 Talbot [Addington  
 Sidmouth, *Viscount*, 1805,  
 Sinclair, *L.*, 1483, St. Clair, a  
 Skelmersdale, *Lord*, 1828,  
 Wilbraham [ricarde, M.)  
 Somerhill, *L.*, 1826 (o Clan-  
 Somers, *Earl*, 1821, Cocks  
 Somerset, *Duke of*, 1546,  
 Seymour  
 Sondes, *Ld.*, 1760, Watson  
 Southampton, *Lord*, 1780,  
 Fitzroy  
 Spencer, *Earl*, 1765  
 Stafford, *M. of*, 1786, Gower  
 Stafford, *L.*, 1640, Jernyngham  
 Stamford, *E. of*, 1628, Grey  
 Stanhope, *Earl*, 1718  
 Stewart of Garlies, *L.*, 1796  
 (\*Galloway, E.)  
 Stourton, *Lord*, 1443  
 Stowell, *Lord*, 1821, Scott  
 Stradbroke, *E. of*, 1821, Rous  
 Strange, *E.*, 1786 (\*Atholl,  
 D.)  
 Strathallan, *Viscount*, 1686,  
 Drummond, a  
 Stuart of Castle Stuart, *L.*  
 1796 (\*Moray, E.)  
 Stuart de Rothsay, *Lord*,  
 1828, Stuart  
 Suffield, *Ld.*, 1786, Harbord  
 Suffolk, *E. of*, 1603, Howard  
 Sundridge and Hamilton, *L.*  
 1776 (\*Argyll, D.)  
 Sussex, *D. of*, 1801, Prince  
 Augustus  
 Sydney, *V.*, 1789, Townshend  
 Talbot, *E.*, 1784, Chetwynd  
 Tankerville, *Earl of*, 1714,  
 Beonet  
 Tenterden, *Ld.*, 1827, Abbot  
 Teynham, *Ld.*, 1616, Curzon  
 Thanet, *E. of*, 1628, Tufton  
 Thomond, *Marq. of*, 1826,  
 O'Brien, b  
 Thurlow, *Ld.*, 1792  
 Torrington, *Vis.*, 1721, Byng  
 Townshend, *Marq.*, 1787  
 Tyrone, *L.*, 1788 (o Water-  
 ford, M.)  
 Tuam, *Abp. of*, P. le Poer  
 Trench  
 Tweeddale, *M. of*, 1694, Hay\*  
 Vane, *E.*, 1823 (o London-  
 derry, M.)  
 Vernon, *Ld.*, 1763  
 Verulam, *Earl of*, 1815,  
 Grimston, \*o  
 Waldegrave, *Earl*, 1729  
 Wallace, *L.*, 1828 [Grey  
 Walsingham, *Ld.*, 1780, De  
 Warwick, *E.*, 1746, Greville  
 Wellesley, *Lord*, 1797, o  
 Wellington, *Duke of*, 1814,  
 Wellesley  
 Wemyss, *Lord*, 1821,  
 (\*Wemyss, E.)  
 Westmoreland, *E. of*, 1624,  
 Fane [Mackenzie  
 Wharcliffe, *Lord*, 1826,  
 Wicklow, *Earl of*, 1793,  
 Howard  
 Willoughby de Broke, *Lord*,  
 1492, Verney  
 Wilton, *E. of*, 1801, Egerton  
 Winchester, *Bp. of*, 1827,  
 C. R. Sumner  
 Winchester, *Marq. of*, 1551,  
 Paulet  
 Winchelsea, *Earl of*, 1628,  
 Hatton  
 Wodehouse, *Lord*, 1799  
 Worcester, *Bishop of*, 1803,  
 F. H. W. Cornwall  
 Yarborough, *Lord*, 1794,  
 Pelham  
 York, *Abp. of*, 1807, Edw.  
 Venables Vernon

## OFFICERS OF THE HOUSE OF PEERS.

*Chairman of Committees*, E. of Shaftesbury  
*Ch. of the Parliaments*, Rt. Hon. Sir G. H. Rose  
*Clerk Assistant*, William Courtenay, esq.  
*Additional Clerk Asst.* Benj. Currey, esq.  
*Reading Clerk and Clerk of the Private*  
*Committees*, Charles Philip Rose, esq.  
*Assist. Reading Clerk and Clerk of Private*  
*Committees*, J. W. Birch, Esq.  
*Counsel to the Chairman of Committees*,  
 Edward Stracey, esq.  
*Clerk of the Journals*, E. G. Walmisley, esq.  
*Copying Clerk*, Edward Parratt, esq.

*Clerk of Engrossments*, Mr. R. Walmisley  
*Clerk of Enrolments*, Mr. R. H. Strachan  
*Other Clerks in the Office*, H. Stone Smith,  
 William E. Walmisley, J. Fred. Leary,  
 Wm. Tubb, George Dike, F. Walmisley,  
 W. A. Green, Lionel H. Thompson  
*Librarian*, John Fred. Leary  
*Short-hand Writer*, W. B. Gurney  
*Gentleman Usher of the Black Rod*, Sir  
 Thomas Tyrwhitt, knt.  
*Yeoman Usher*, Robert Quarmer, esq.  
*Serjeant at Arms*, Geo. F. Seymour, esq.  
*Deputy*, Mr. W. Butt  
*Receiver of Fees*, Mr. Shells.

## HOUSE OF COMMONS.—ELECTED JULY, 1826.

Speaker, Right Honourable Charles Manners Sutton.

<i>English</i> County Members .....	82	} 489	<i>Buckinghamshire</i> , Marquis of Chandos
Universities .....	4		Hon. Robert John Smith
Cities and Boroughs .....	403		<i>Buckingham</i> , Sir G. Nugent, bart., Sir T. Francis Freemantle, bart.
<i>Scotch</i> County Members .....	30	} 45	<i>Bury St. Edmunds</i> , Earl of Euston, Ear Jermyn
Cities and Boroughs .....	15		<i>Callington</i> , A. Baring, M. Attwood
<i>Irish</i> County Members .....	64	} 100	<i>Calne</i> , Hon. James Abercrombie, Sir James Macdonald, bart.
University .....	1		<i>Cambridgeshire</i> , Lord C. S. Manners, Lord Francis G. Osborne
Cities and Boroughs .....	35		<i>Cambridge University</i> , Vis. Palmerston
<i>Welsh</i> County Members .....	12	} 24	Sir N. C. Tindal, knt.
Cities and Boroughs .....	12		<i>Cambridge Borough</i> , Marquis Graham Frederick William Trench

Total Number of Members.....658

## ENGLAND AND WALES.

<i>Abingdon</i> , John Maberley	<i>Carmarthen</i> , John Jones
<i>Agmondesham</i> , Thomas Tyrwhitt Drake,	<i>Carnarvonshire</i> , Lord Newborough
William Tyrwhitt Drake	<i>Carnarvon</i> , Lord William Paget
<i>Aldborough</i> , Clinton James Fynes Clinton,	<i>Castle Rising</i> , Lord H. Cholmondeley, Hon Fulke G. Howard
Sir Alexander Cray Grant, bart.	<i>Cheshire</i> , D. Davenport, W. Egerton
<i>Aldeburgh</i> , J. Walker, W. Lewis	<i>Chester</i> , Viscount Belgrave, Hon. Robt. Grosvenor
<i>Andover</i> , Sir John Walter Pollen, bart.,	<i>Chichester</i> , Lord John Geo. Lennox, W. liam Stephen Poyntz
Thomas Assheton Smith, jun.	<i>Chippenham</i> , E. F. Maitland, F. Gye
<i>Anglesey</i> , Earl of Uxbridge	<i>Christchurch</i> , Right Hon. Sir Geo. Henry Rose, George Pitt Rose
<i>Appleby</i> , Hon. Henry Tufton, Lord Viscount Maitland	<i>Cirencester</i> , Lord Apsley, J. Cripps
<i>Arundel</i> , Edward Lombe, jun., Alderman J. Atkins	<i>Clithero</i> , Hon. Robert Curzon, Hon. Pergrine Francis Cust
<i>Ashburton</i> , Rt. Hon. W. S. Bourne, Sir Laurence Vaughan Walk, bart.	<i>Cockermouth</i> , Viscount Garlies, L. Peel
<i>Aylesbury</i> , Lord Nugent, W. Rickford	<i>Colchester</i> , Sir G. Henry Smyth, Daniel Whittle Harvey
<i>Banbury</i> , Hon. A. Charles Legge	<i>Corfe Castle</i> , Nat. W. Peach, G. Banks
<i>Barstaple</i> , F. Hodgson, H. Alexander	<i>Cornwall</i> , Sir R. Rawlinson Vyvyan, bart. E. W. Wynn Pendarvis
<i>Bath</i> , Lord J. Thynne, Earl of Brecknock	<i>Coventry</i> , Richard Edensor Heathcote
<i>Beaumaris</i> , Sir Robert Williams, bart.	Thomas Belcliffe Fyler
<i>Bedfordshire</i> , Thomas Potter Macqueen, Marquis of Tavistock	<i>Cricklade</i> , Joseph Pitt, R. Gordon
<i>Bedford</i> , Lord Geo. Wm. Russel, William Henry Whitbread	<i>Cumberland</i> , Sir John Lowther, bart., John Christian Curwen
<i>Bedwin</i> , Rt. Hon. Sir John Nicholl, John Jacob Buxton	<i>Dartmouth</i> , J. Bastard, J. H. Cooper
<i>Beeralston</i> , Lord Lovaine, Hon. Percy Ashburnham	<i>Derbyshire</i> , Sir W. W. Wynn, bart.
<i>Berkshire</i> , C. Dundas, R. Palmer	<i>Denbigh</i> , Frederick Richard West
<i>Berwick-upon-Tweed</i> , Marcus Beresford, Sir Francis Blake, bart.	<i>Derbyshire</i> , Right Hon. Lord G. A. H. C. vendish, Francis Mandy
<i>Beverley</i> , J. Stewart, C. H. Batley	<i>Derby</i> , Henry Frederick Compton Cavendish, Samuel Crompton
<i>Bevoidley</i> , Wilson Aylesbury Roberts	<i>Devizes</i> , J. Pearse, G. W. Taylor
<i>Bishop's Castle</i> , W. Holmes, E. Rogers	<i>Devonshire</i> , E. Pollexfen Bastard, S. Thomas Dyke Acland, bart.
<i>Blechingley</i> , Charles Tennyson, William Ewart, esq.	<i>Dorsetshire</i> , H. Banks, E. B. Portman
<i>Bodmyn</i> , Davies Gilbert, Horace Beauchamp Seymour	<i>Dorchester</i> , Robert Williams, Hon. Anthony Wm. Ashley Cooper
<i>Boroughbridge</i> , G. Munday, H. Dawkins	<i>Dover</i> , Charles Poulett Thomson, William Henry Trant
<i>Bossiney</i> , Hon. John Stuart Wortley, Edward Rose Tunno	<i>Downton</i> , Hon. B. Bouverie, A. Powell
<i>Boston</i> , G. J. Heathcote, Neill Malcolm	<i>Droitwich</i> , Earl Sefton, J. H. H. Foley
<i>Brackley</i> , R. H. Bradshaw, J. Bradshaw	
<i>Bramber</i> , John Irving, Hon. Frederick Gough Calthorpe	
<i>Breconshire</i> , Thomas Wood	
<i>Bridgenorth</i> , Thomas Whitmore, William Wolryche Whitmore	
<i>Brecon</i> , George Gould Morgan	
<i>Bridgewater</i> , William Astell, Charles Kemeys Kemeys Tynte	
<i>Bridport</i> , Sir H. David Cholwell St. Paul, bart., Henry Warburton	
<i>Bristol</i> , R. H. Davis, H. Bright	



*Dunwich*, M. Barne, A. Arcedeckne  
*Durham*, William Russell, Hon. W. J. Frederick Poulett  
*Durham (City)*, Michael Angelo Taylor, Sir Henry Hardinge  
*Essex*, Sir E. Harvey, C. C. Western  
*Evesham*, Sir C. Cockerell, E. Protheroe  
*Exeter*, S. T. Kekewich, L. W. Buck  
*Eye*, Sir Edward Kerrison, bart., Sir Miles Nightingale  
*Flintshire*, Sir Thomas Mostyn, bart.  
*Flint*, Sir Edw. Pryce Lloyd, bart.  
*Fowey*, Hon. R. H. Eden, G. Lucy  
*Gatton*, Hon. Wm. Scott, M. G. Prendergast  
*Glamorganshire*, Sir Christopher Cole  
*Gloucestershire*, Right Hon. Lord R. E. H. Somerset, Sir B. W. Guise  
*Gloucester*, E. Webb, R. B. Cooper  
*Grantham*, Hon. Fred. James Talmash, Montague John Cholmeley  
*Great Grimsby*, C. Wood, G. F. Heneage  
*Gristead, East*, Lord Strathaven, Hon. Charles Cecil Cope Jenkinson  
*Guildford*, G. C. Norton, A. Onslow  
*Haleston*, Marquis of Carmarthen, Lord J. N. B. B. Townshend  
*Hampshire*, John Fleming, Sir William Heathcote, bart.  
*Harwich*, Rt. Hon. John Charles Herries, Rt. Hon. Sir W. Rae  
*Hastlemere*, Rt. Hon. Sir J. Beckett, bart., George Lowther Thompson  
*Hastings*, J. E. Denison, J. Planta  
*Haverfordwest*, R. B. P. Philipps  
*Hedon*, J. Baillie, T. Hyde Villiers  
*Herefordshire*, Sir J. Geers Cotterell, bt., Robert Price  
*Hereford*, Viscount Eastnor, E. B. Clive  
*Hertfordshire*, Sir J. S. Sebright, bart., Nicholson Calvert  
*Hertford*, T. Byron, T. S. Duncombe  
*Heytesbury*, Edw. Henry A'Court, Henry Stafford Northcote  
*Higham Ferrers*, Hon. F. C. Ponsonby  
*Hindon*, Hon. G. M. Fortescue, Hon. A. G. Calthorpe  
*Honiton*, J. J. Guest, H. B. Lott  
*Horsham*, R. Hurst, N. W. R. Colborn  
*Huntingdonshire*, Visc. Mandeville, Wm. Henry Fellowes  
*Huntingdon*, J. Calvert, J. Stuart  
*Hythe*, Stewart Majoribanks, Sir R. T. Townsend Farquhar, bart.  
*Ipswich*, C. Mackinnon, R. A. Dundas  
*Ivelchester*, Hon. Lionel Talmash, Hon. Felix Thomas Talmash  
*Kent*, William Philip Honeywood, Sir Edward Knatchbull  
*King's Lynn*, Right Hon. Lord W. H. C. Bentinck, Hon. J. Walpole  
*Kingston-upon-Hull*, August. John O'Neill, Daniel Sykes  
*Knarborough*, Right Hon. Geo. Tierney, Sir J. Mackintosh  
*Lancashire*, J. Blackburne, Lord Stanley  
*Lancaster*, John F. Cawthorne, T. Greene  
*Launceston*, James Brogden, Hon. Pownall Bastard Pellev  
*Leicestershire*, Lord Robert Manners, Geo. Anthony Legh Keck  
*Leicester*, Sir C. Abney Hastings, Robert Otway Cave

*Leominster*, Lord Hotham, R. Stephenson  
*Lewes*, T. R. Kemp, Sir J. Shelley, bart.  
*Lincolnshire*, Charles Chaplin, Sir Wm. Arncliffe Ingilby, bart.  
*Lincoln*, John Nicholas Fazakerley, Ch. Delaet Waldo Sibthorp  
*Liskeard*, Lord Elliot, Sir W. H. Pringle  
*Litchfield*, Sir Geo. Anson, George Granville Venables Vernon  
*Liverpool*, Right Hon. William Huskisson, Isaac Gascoyne  
*London*, Ald. W. Thompson, Ald. Robert Waithman, W. Ward, Ald. M. Wood  
*Looe East*, J. D. Buller Elphinstone, Hon. W. Sebright Lascelles  
*Looe West*, C. Buller, Sir C. Hulse, bart.  
*Lostwithiel*, Vis. Valletort, Hon. E. Cust  
*Ludgershall*, Hon. G. J. W. Agar Ellis, Edward Thomas Foley  
*Ludlow*, Visc. Clive, Hon. R. H. Clive  
*Lyme Regis*, Hon. Henry Sutton Fane, John Thomas Fane  
*Lymington*, W. Boyd, Geo. Burrard, Esq.  
*Maidstone*, J. Wells, A. W. Roberts  
*Maldon*, Hugh Dick, Thomas Barrett Lennard  
*Malmesbury*, Sir Charles Forbes, bart., John Forbes  
*Malton*, J. C. Ramsden, Visc. Normanby  
*Marlborough*, Earl Bruce, Lord Brudenell  
*Marlow*, Great, Owen Williams, Thomas Peers Williams  
*Merionethshire*, Sir R. W. Vaughan  
*Middlesex*, G. Byng, S. W. Whitbread  
*Midhurst*, John Smith, Abel Smith  
*Milborne Port*, J. H. North, A. Chichester  
*Minehead*, J. F. Luttrell, J. Blair  
*Monmouthshire*, Sir Charles Morgan, bart., Lord G. Charles Henry Somerset  
*Monmouth*, Marquis of Worcester  
*Montgomeryshire*, Right Hon. C. Watkin Williams Wynn  
*Montgomery*, Henry Clive  
*Morpeth*, Wm. Ord, Visc. Morpeth  
*Newark upon Trent*, Sir William Henry Clinton, Henry Willoughby  
*Newcastle-under-Lyme*, Robert J. Wilmot  
*Horton*, R. Borradaile  
*Newcastle-upon-Tyne*, Sir M. White Ridley, bart., Cuthbert Ellison  
*Newport, Cornwall*, Jonathan Raine, Hon. C. Greathead Bertie Percy  
*Newport, I. W.*, Spencer Perceval, Esq. Wm. Henry John Scott  
*Newton, Lancas.*, T. Legh, T. Alcock  
*Newtown, I. W.*, Hudson Gurney, Charles Compton Cavendish  
*Norfolk*, T. W. Coke, E. Wadehouse  
*Northallerton*, Hon. Henry Lascelles, Sir John Poe Beresford, bart.  
*Northamptonshire*, W. Ralph Cartwright, Viscount Althorp  
*Northampton*, Sir George Robinson, bart., William Leader Maberley  
*Northumberland*, Hon. Henry T. Liddell, Matthew Bell  
*Norwich*, Wm. Smith, Jonathan Peel  
*Nottinghamshire*, Frank Sotherton, John Saville Lumley  
*Nottingham*, Lord Rancliffe, J. Birch  
*Okehampton*, Sir Compton Domville, bart., Joseph Holden Stratt

*Orford*, Sir H. F. Cooke, Q. Dick  
*Oxfordshire*, W. H. Ashhurst, J. Fane  
*Oxford University*, Rt. Hon. Robert Peel,  
 T. G. Bucknall Estcourt  
*Orford City*, James Haighton Langston,  
 John Ingram Lockhart  
*Pembrokeshire*, Sir John Owen, bart.  
*Pembroke*, Hugh Owen Owen  
*Penryn*, D. Barclay, W. Manning  
*Peterborough*, Sir Robert Heron, bart., Sir  
 James Scarlett  
*Petersfield*, H. Joliffe, W. Marshall  
*Plymouth*, Rt. Hon. Sir G. Cockburn, Sir  
 Thomas Byam Martin  
*Plympton*, Gibbs Crawford Antrobus, Sir  
 Charles Wetherell  
*Pontefract*, T. Houldsworth, Le Gendre  
 Nicholas Starkie  
*Poole*, Benjamin Lester Lester, Hon. Wm.  
 Francis Spencer Ponsonby  
*Portsmouth*, J. B. Carter, F. Baring  
*Preston*, Hon. E. G. S. Stanley, J. Wood  
*Queenborough*, J. Capel, Lord Downes  
*Radnor County*, Rt. Hon. T. F. Lewis  
*Radnor, New*, Richard Price  
*Reading*, J. B. Monk, C. Fyshe Palmer  
*Reigate*, Sir J. S. Yorke, J. Cocks  
*Retford, East*,  
*Richmond*, Hon. Thomas Dundas, Hon. R.  
 L. Dundas  
*Ripon*, Sir R. H. Inglis, bt., L. H. Petit  
*Rochester*, Hon. H. Dundas, Ralph Bernal  
*Romney, New*, Geo. Hay Dawkins Pennant,  
 George William Tapps  
*Rutland*, Sir Gerard Noel Noel, bart., Sir  
 Gilbert Heathcote, bart.  
*Rye*, R. Arkwright, jun., H. Bonham  
*St. Alban's*, C. Smith, J. Easthope  
*St. Germain*, James Loch, C. Ross  
*St. Ives*, Rt. Hon. C. Arbutnot, J. Halse  
*St. Mawes*, Sir S. Bernard Morland, Sir  
 Cdr. Edmund Carrington  
*St. Mitchell*, H. Labouchere, W. Leake  
*Salop*, Sir R. Hill, bart., J. C. Pelham  
*Saltash*, A. Spottiswoode, C. Macaulay  
*Sandwich*, Admiral Sir E. W. C. Rich.  
 Owen, Joseph Maryvatt  
*Sarum, New*, Hon. H. P. Bouverie, Wad-  
 ham Wyndham  
*Sarum, Old*, James Alexander, Rt. Hon.  
 Stratford Canning  
*Scarborough*, Rt. Hon. C. Manners Sutton,  
 Hon. Edmund Phipps  
*Seaford*, John Fitzgerald, Hon. Major Ellis  
*Shaftesbury*, Ralph Lyecester, Edward  
 Davies Davenport  
*Shoreham, New*, Sir Charles Merrick Bur-  
 rell, Henry Howard  
*Shrewsbury*, P. Corbett, R. A. Slaney  
*Somersetshire*, William Dickinson, Sir Tho-  
 mas Buckler Lethbridge  
*Southampton*, William Chamberlayne, Abel  
 Rous Dottin  
*Southwark*, Charles Calvert, Sir Robert  
 Thomas Wilson, kn.  
*Staffordshire*, Edward John Littleton, Sir  
 John Wrottesley, bt.  
*Stafford*, R. Benson, T. W. Beaumont  
*Stamford*, Lord T. Cecil, T. Chaplin  
*Steyning*, G. R. Philips, P. Du Cane  
*Stockbridge*, T. Grosvenor, G. Wilbraham  
*Stratbury*, J. M. Macleod, B. Walrond

*Suffolk*, Thomas Sherlock Gooch, Sir Wil-  
 liam Rowley, bt.  
*Surrey*, W. J. Denison, C. N. Pallmer  
*Sussex*, W. Burrell, E. J. Curteis  
*Tamworth*, Lord Chas. Vere Ferras Town-  
 send, William Yates Peel  
*Tavistock*, Lord W. Russell, Visc. Ebrington  
*Taunton*, H. Seymour, W. Peachey  
*Tewkesbury*, J. E. Dowdeswell, J. Martin  
*Thetford*, Lord Charles Fitzroy, jun., Wil-  
 liam Bingham Baring  
*Thirsk*, R. Frankland, R. Greenhill Russell  
*Tiverton*, Visc. Sandon, Rt. Hon. R. Ryder  
*Totness*, Rt. Hon. T. P. Courtenay, Earl  
 of Darlington  
*Tregony*, Step. Lushington, Jas. Brougham  
*Truro*, Lord Fitzroy, Jas. Henry Somerset,  
 William Edward Tomline  
*Wallingford*, W. Lewis Hughes, R. Knight  
*Warcham*, J. Calcraft, C. B. Wall  
*Warwickshire*, D. S. Dugdale, F. Lawley  
*Warwick*, Hon. Sir C. J. Greville, J. Tomes  
*Wells*, C. W. Taylor, J. P. Tudway  
*Wendover*, Sam. Smith, Geo. Smith  
*Wenlock*, Hon. Geo. C. Weld Forester,  
 Paul Beilby Thompson  
*Woolby*, Lord W. Thynne, Hon. H. F.  
 Thynne  
*Westbury*, Sir M. Masseh Lopez, bt., Right  
 Hon. Sir George Warrender, bt.  
*Westminster*, Sir Francis Burdett, bt., John  
 Cam Hobhouse  
*Westmoreland*, Viscount Lowther, Hon.  
 Henry Cecil Lowther  
*Weymouth and Melcombe Regis*, E. B.  
 Sugden, M. Ure, T. F. Buxton, J.  
 Gordon  
*Whitchurch*, Samuel Scott, Hon. John Ro-  
 bert Townshend  
*Wigan*, J. A. Hodson, J. Lindsay  
*Wilton*, J. H. Penruddocke, E. Baker  
*Wiltshire*, J. Bennett, Sir J. D. Astley, bt.  
*Winchelsea*, H. Brougham, Visc. Howick  
*Winchester*, Paulet St. John Mildmay, Sir  
 Edward Hyde East, bt.  
*Windsor*, J. Ramsbottom, Sir R. H. Vivian  
*Woodstock, New*, Marquis of Blandford,  
 Lord Ashley  
*Wolton Bassett*, H. Twiss, G. Philips  
*Worcestershire*, Hon. H. B. Lygon, Sir  
 Thos. Edw. Winnington, bt.  
*Worcester*, T. H. H. Davies, G. R. Robinson  
*Wycombe*, Sir John Dashwood King, bt.,  
 Sir Thomas Baring, bt.  
*Yarmouth, Gt.* Hon. George Anson, Charles  
 Edmund Rumbold  
*Yarmouth, I. W.*, T. Wallace, J. Phillimore  
*Yorkshire*, Visc. Milton, Hon. W. Dun-  
 combe, R. F. Wilson, J. Marshall  
*York*, Marm. Wyvill, James Wilson

## SCOTLAND.

*Aberdeenshire*, Hon. William Gordon  
*Aberdeen, &c.*, Joseph Hume  
*Argyleshire*, W. Fred. Campbell  
*Ayrshire*, James Montgomerie  
*Ayr, Irvine, &c.*, Thomas Francis Kennedy  
*Banffshire*, John Morison  
*Berwickshire*, Hon. Ant. Maitland  
*Caithness and Bute*, Hon. J. Sinclair  
*Crail, Kilkenny, &c.*, James Balfour  
*Cromarty and Nairnsh.*, D. Davidson, jun.

*Dunbartonshire*, J. Campbell, jun.  
*Dumfriesshire*, Sir Wm. J. Hope  
*Dumfries*, &c. W. R. K. Douglas  
*Dysart*, &c. Sir R. C. Ferguson  
*Edinburghshire*, Sir George Clerk, bt.  
*Edinburgh*, Rt. Hon. William Dundas  
*Elginshire*, Hon. Francis William Grant  
*Elgin*, &c., Hon. Alexander Duff  
*Fife*, James Wemyss  
*Forfarshire*, Hon. W. R. Maule  
*Forfar*, &c., Hon. Hugh Lindsay  
*Fortrose*, &c., Robert Grant  
*Glasgow*, &c., Archibald Campbell  
*Haddingtonshire*, Lord John Hay  
*Haddington*, &c., A. J. Dalrymple  
*Inverkeithing*, &c., Robert Downie  
*Invernesshire*, Right Hon. C. Grant  
*Kincardineshire*, Hon. H. Arbuthnot  
*Kinrosshire*, &c., G. E. G. F. Pigott  
*Kirkcudbright*, R. Cutlar Fergusson  
*Kirkwall*, &c., Sir Hugh Innes, bt.  
*Lanarkshire*, Sir M. S. Stewart, bt.  
*Linlithgowshire*, Hon. Sir A. Hope  
*Orkney and Shetland*, Hon. G. H. L. Dundas  
 *Peebleshire*, Sir J. Montgomery, bt.  
*Perthshire*, Rt. Hon. Sir George Murray  
*Renfrewshire*, John Maxwell  
*Rosshire*, Sir J. W. Mackenzie, bt.  
*Roxburghshire*, H. F. Scott, jun.  
*Selkirkshire*, William Elliot Lockbart  
*Selkirk*, &c., Adam Hay  
*Stirlingshire*, H. Home Drummond  
*Sutherland*, Lord F. L. Gover  
*Wigtownshire*, Sir William Maxwell, bt.  
*Wigton*, &c., John Henry Lowther

IRELAND.

*Antrimshire*, Hon. J. B. Richard O'Neill,  
 E. Alex. Mac-Naghten  
*Armaghshire*, Hon. Henry Caulfield, Cha.  
 Brownlow  
*Armagh Borough*, Right Hon. H. Goulburn  
*Athlone*, Richard Handcock, jun.  
*Bandonbridge*, Lord John Russell  
*Belfast*, Earl of Belfast  
*Carlownshire*, H. Bruen, T. Kavanagh  
*Carlow Borough*, Lord Tullamore  
*Carrickfergus*, Sir A. Chichester, bt.  
*Cashel*, Ebenezer John Collett  
*Cavanshire*, H. Maxwell, Alex. Saunderson  
*Clare*, Lucius O'Brien, Daniell O'Connell  
*Clongmel*, J. H. Massey Dawson  
*Coleraine*, Sir J. W. H. Brydges, kt.  
*Corkshire*, Hon. R. King, Hon. John Boyle  
*Cork*, Sir N. C. Colthurst, J. H. Hutchinson  
*Donegalshire*, George Vaughan Hart, Earl  
 Mountcharles  
*Downshire*, Lord A. Hill, Visc. Castlereagh  
*Downpatrick*, J. Waring Maxwell  
*Drogheda*, Peter Van Homrigh  
*Dublinshire*, H. White, R. W. Talbot  
*Dublin City*, G. Moore, H. Grattan  
*Dublin University*, J. W. Croker  
*Dundalk*, Charles Barclay  
*Dungannon*, Hon. Thomas Knox  
*Dungarvon*, Hon. George Lamb  
*Ennis*, W. S. O'Brien  
*Enniskillen*, Hon. A. H. Cole  
*Fermanaghshire*, M. Archdall, Visc. Corry  
*Galwayshire*, J. Daly, J. S. Lambert  
*Galway*, James O'Hara

*Kerryshire*, Right Hon. Maurice Fitzge-  
 rald, Hon. William Hare  
*Kildareshire*, Lord W. C. O'Brien Fitzge-  
 rald, Robert Latouche  
*Kilkennyshire*, Hon. C. Har. Butler Clarke,  
 Viscount Duncannon  
*Kilkenny Borough*, John Doherty  
*King's County*, Thomas Bernard, Lord Ox-  
 mantown  
*Kinsale*, John Russell  
*Leitrim*, Visc. Clements, S. White  
*Limerickshire*, Hon. Richard Hobart Fitz-  
 gibbon, Thomas Lloyd  
*Limerick*, Thomas Spring Rice  
*Lisburne*, Henry Meynell  
*Londonderryshire*, George Robert Dawson,  
 Alex. Robert Stewart  
*Londonderry City*, Right Hon. Sir George  
 Fitzgerald Hill, bt.  
*Longfordshire*, Viscount Forbes, Sir Geo.  
 Ralph Fetherston, bt.  
*Louthshire*, J. L. Foster, A. Dawson  
*Mallow*, C. D. O. Jephson  
*Mayo*, Lord Bingham, James Browne  
*Meathshire*, Earl of Bective, Sir Marcus  
 Somerville, bt.  
*Monaghan*, Evelyn John Shirley, Hon.  
 Henry Robert Westenra  
*Newry*, Hon. Henry Knox  
*Portarlington*, James Farquhar  
*Queen's County*, Sir Charles Henry Coote,  
 bt., Sir Henry Parnell, bt.  
*Roscommonshire*, A. French, Hon. R. King  
*Ross, New*, William Wigram  
*Sligoshire*, Hon. H. King, E. Synge Cooper  
*Sligo Borough*, Owen Wynne  
*Tipperary*, Hon. F. H. Aldborough Prittie,  
 John Hely Hutcheson  
*Tralee*, Sir Edward Denny  
*Tyrone*, William Stewart, Hon. Henry  
 Thomas Lowry Corry  
*Watersfordshire*, R. Power, H. V. Stewart  
*Waterford City*, Right Hon. Sir John New-  
 port, bt.  
*Westmeath*, G. Rochfort, H. Morgan Tuite  
*Wexfordshire*, R. S. Carew, Visc. Stopford  
*Wexford*, Admiral Henry Evans  
*Wicklow*, Hon. G. L. Proby, Jas. Grattan  
*Youghall*, Hon. George Ponsonby

OFFICERS OF THE HOUSE OF  
 COMMONS.

*Chief Clerk*, John Henry Ley, esq.  
*Clerk Assistant*, John Rickman, esq.  
*Second Clerk Assistant*, William Ley, esq.  
*Clerk of Committees of Privileges and  
 Elections*, Thomas Dyson, esq.  
*Assistant Ditto*, Mr. R. Jones.—*Clerks*,  
 Mr. G. White, Mr. Walmsley, and Mr.  
 Hall.  
*Clerk of Fees*, J. E. Dorrington, esq.—  
*Clerks*, Mr. G. Dyson, Mr. A. Jones  
*Principal Committee Clerks*, Ed. Stracey,  
 G. Whittam, S. Gunnell, W. G. Rose,  
 esqrs.  
*Dep. Committee Clerks*, T. Beeby, R. Chal-  
 mers, G. Whittam, jun., G. White  
*Extra Clerks*, Mr. J. Rose, Mr. Pole, C.  
 Gunnell, Mr. Chalmers  
*Clerk of the Journals and Papers*, J.  
 Bull, esq.  
*Assistant Ditto*, Mr. Dickinson

*Clerks*, T. Gudge, C. Rowland, C. White,  
— Postiethwaite

*Clerks of the Ingressments*, Edward Stracey, esq. and Mr. David Jones

*Assistant Ditto*, Mr. W. Gunnell

*Clerks*, Mr. S. Gunnell, jun. Mr. G. Gunnell

*Clerks in the Private Bill Office*, Mr. E. Johnson, W. Hawes, R. Gibbons

*Short-hand-writer*, Wm. B. Gurney, esq.

*Serjeant-at-Arms*, Henry Seymour, esq.—  
*Deputy*, John Clementson, esq.

*Chaplain to the House of Commons*, the  
Rev. Evelyn L. Sutton

*Secretary to the Speaker*, E. Phillips, esq.

*Trainbearer*, Thomas Easley—*Librarian*,  
Mr. B. Spiller

*Printer of the Journals*, &c. Messrs. Luke  
Hansard and Sons

*Printer of the Votes*, Mr. J. B. Nichols

*Deliverer*, Mr. Jas. Mitchell

*Deputy Housekeeper*, Mr. John Bellamy;  
also collects Serjeant's fees

*Assistant*, Mr. Edmund Bellamy.

### JUDGES.

Right Hon. Lord Lyndhurst, Lord High  
Chancellor of Great Britain.

Right Hon. Sir J. Leach, Master of the  
Rolls.

Right Hon. Sir Launcelot Shadwell, Vice-  
Chancellor.

*KING'S BENCH*.—Right Hon. Lord Ten-  
terden, *L.C.J.* Sir John Bayley. Sir G.

Sowley Holroyd. Sir Joseph Littledale.

*COMMON PLEAS*.—Right Hon. Sir Wil-  
liam Draper Best, *L.C.J.* Sir James Allan  
Park. Sir James Burrough. Sir Stephen  
Gaselee.

*EXCHEQUER*.—Right Hon. Sir William  
Alexander, *L.C.B.* Sir W. Garrow. Sir  
John Hullock. Sir John Vaughan.

### ARCHBISHOPS AND BISHOPS.

The first date is that of Consecration, the second  
of Translation to the See.

*Canterbury*, 1813, 1828—Dr. Wm. Howley,  
Primate of all England

*York*, 1791, 1807—Hon. Dr. Edward V.  
Vernon, Primate of England

*London*, 1824, 1828—Dr. C. J. Blomfield

*Durham*, 1826—Dr. Wm. Van Mildert

*Winchester*, 1826, 1827—Dr. C. R. Sumner

*Worcester*, 1797, 1808—Dr. F. H. W. Corn-  
wall

*Bangor*, 1800, 1809—Dr. H. Wm. Majendie

*Hereford*, 1802, 1815—Dr. George Isaac

*Huntingford*

*Salisbury*, 1803, 1825—Dr. Thos. Burgess

*Norwich*, 1805—Dr. Henry Bathurst

*St. Asaph*, 1807, 1815—Dr. John Luxmoore

*Ely*, 1809, 1812—Dr. Bowyer Edw. Sparke

*Bath and Wells*, 1812, 1824—Dr. G. H. Law

*Rochester*, 1813, 1827—Dr. George Murray

*Lichfield and Coventry*, 1815, 1824—Hon.

Dr. Henry Ryder

*Peterborough*, 1816, 1819—Dr. Her. Marsh

*Lincoln*, 1820, 1827—Dr. John Kaye

*Exeter*, 1820—Dr. William Carey

*Gloucester*, 1824—Dr. Christopher Bethell

*Chichester*, 1824—Dr. Robert J. Carr

*St. David's*, 1825—Dr. John Banks Jen-  
kinson

*Oxford*, 1827—Dr. Charles Lloyd

*Bristol*, 1827—Dr. Robert Gray

*Carlisle*, 1827—Dr. Hugh Percy

*Llandaff*, 1827—Dr. Edward Coplestone

*Chester*, 1828—Dr. John Bird Sumner

### LORD LIEUTENANTS, &c.

OF THE SEVERAL COUNTIES OF ENGLAND  
AND WALES.

#### ENGLAND.

*Bedford*, Lord Grantham

*Berks*, Earl of Abingdon

*Bucks*, Duke of Buckingham

*Cambridge*, Earl of Hardwicke

*Chester*, Earl of Stamford and Warrington

*Cornwall*, Earl of Mount Edgcombe—

*Lord Warden*, Marquis of Hertford

*Cumberland*, Earl of Lonsdale

*Derby*, Duke of Devonshire

*Devon*, Earl Fortescue

*Dorset*, Earl Digby

*Durham*, Marq. of Cleveland—*Custos Rot.*  
Bishop of Durham

*Essex*, Viscount Maynard

*Gloucester*, Duke of Beaufort

*Hereford*, Earl Somers

*Hertford*, Earl of Verulam

*Huntingdon*, Duke of Manchester

*Kent*, Marquis Camden

*Lancashire*, Earl of Derby

*Leicester*, Duke of Rutland

*Lincoln*, Earl Brownlow

*Middlesex*, Duke of Portland

*Monmouth*, Duke of Beaufort

*Norfolk*, Hon. John Wodehouse

*Northampton*, Earl of Westmorland

*Northumberland*, Duke of Northumberland

*Nottingham*, Duke of Newcastle

*Oxford*, Earl of Macclesfield

*Rutland*, Marq. of Exeter

*Shropshire*, Earl of Powis

*Somerset*, Marquis of Bath

*Southampton*, Duke of Wellington

*Stafford*, Earl Talbot

*Suffolk*, Duke of Grafton

*Surrey*, Viscount Middleton

*Sussex*, Earl of Egremont

*Tower-Hamlets*, Duke of Wellington

*Warwick*, Earl of Warwick

*Westmorland*, Earl of Lonsdale

*Wills*, Marquis of Lansdowne

*Worcester*, Earl of Coventry

*York, East-Riding*, Earl of Carlisle

— *West-Riding*, Earl of Harewood

— *North-Riding*, Duke of Leeds

#### WALES.

*Anglesey*, Marquis of Anglesey

*Brecon*, Duke of Beaufort

*Cardigan*, Wm. E. Powell, esq.

*Carmarthen*, Lord Dynevor

*Carnarvon*, Thomas A. Smith, esq.

*Denbigh*, Sir Watkin W. Wynn, bart.

*Flint*, Earl Grosvenor

*Glamorgan*, Marquis of Bute

*Merioneth*, Sir W. W. Wynn, bart.

*Montgomery*, Earl of Powis

*Pembroke*, Sir John Owen

*Radnor*, Lord Rodney

KING'S MINISTERS ABROAD.

- Austria*.—Amb. Ex. and Plen., Lord Cowley. Sec. of Emb., Hon. Fr. R. Forbes.
- Russia*.—Amb. Ex. and Plen., Lord Heytesbury. Sec. of Emb., Hon. Wm. Temple.
- France*.—Amb. Ex. and Plen., Lord Stuart de Rothesay. Sec. of Emb., Ham. C. Hamilton, Esq.
- Spain*.—Env. Ex. and Min. Plen., Rt. Hon. Rob. Gordon. Sec. of Leg. Geo. Bosanquet, Esq.
- Netherlands*.—Amb. Ex. and Plen., Right Hon. Sir Charles Bagot. Sec. of Emb. And. S. Douglas, Esq.
- Turkey*.—Amb. Ex. and Plen., Rt. Hon. Stratford Canning. Sec. of Emb., William Turner, Esq. Oriental Sec. Rob. Liston Elliot, Esq.
- Prussia*.—Env. Ex. and Min. Plen., Sir Brook Taylor, C. C. H. Sec. of Leg. Geo. H. Seymour, Esq.
- Portugal*.—Amb. Ex. and Plen., Rt. Hon. Sir Frederick Lamb. Sec. of Emb., J. H. Mandeville, Esq.
- America (United States of)*.—Env. Ex. and Min. Plen., Right Hon. Chas. Rd. Vaughan. Sec. of Leg., Chas. Bankhead, Esq.
- Naples*.—Env. Ex. and Min. Plen., Rt. Hon. W. Noel Hill. Sec. of Leg., Hon. W. F. Strangways.
- Germanic Confederation*.—Min. Plen. to reside with the Diet at Francfort, H. U. Addington, Esq. Sec. of Leg., John R. Milbanke, Esq.
- Sweden*.—Env. Ex. and Min. Plen., Lord Bloomfield. Sec. of Leg., Hon. John A. D. Bloomfield.
- Denmark*.—Env. Ex. and Min. Plen., Rt. Hon. Hen. W. W. Wynn. Sec. of Leg. Peter Browne, Esq.
- Sardinia*.—Env. Ex. and Min. Plen., Rt. Hon. Aug. John Foster. Sec. of Leg., Charles M. St. George, Esq.
- Bavaria*.—Env. Ex. and Min. Plen., Lord Erskine. Sec. of Leg., Tho. Cartwright, Esq.
- Wurtemberg*.—Env. Ex. and Min. Plen., Edw. C. Disbrowe, Esq. Sec. of Leg., Chas. H. Hall, Esq.
- Tuscany*.—Env. Ex. and Min. Plen., Rt. Hon. Lord Burghersh. Sec. of Leg., Lord Alb. Conyngnam.
- Saxony*.—Min. Plen., Edw. M. Ward, Esq. Sec. of Leg., C. T. Barnard, Esq.
- Switzerland*.—Min. Plen., Hon. Algernon Percy. Sec. of Leg., Hon. Geo. Edgcumbe.
- United Provinces of the Rio de la Plata*.—Min. Plen., Henry S. Fox, Esq.
- Colombia*.—Env. Ex. and Min. Plen., Geo. Will. Chadd, Esq. Sec. of Leg., Patrick Campbell, Esq.
- Mexico*.—Sec. of Leg., Richard Pakenham, Esq.
- Brazil*.—Env. Ex. and Min. Plen. Lord Ponsonby. Sec. of Leg., Arthur Aston, Esq.

FOREIGN MINISTERS & CONSULS IN ENGLAND.

- Austria*.—Amb. Extra. and Plen., Prince Esterhazy, 7, Chandos-street, Cavendish-square
- Consul-Gen., N. M. Rothschild, esq., 2, New court, St. Swithin's-lane
- Russia*.—Amb. Extra. and Plen., Prince de Lieven, 30, Dover-street
- Consul Gen., Geo. Benkerhausen, esq.
- France*.—Amb. Ex. and Plen., Prince Jules de Polignac, 50, Portland-pl.
- Consul-Gen., Baron Séguier, 4, George-street, Manchester-square
- Spain*.—Env. Ex. and Min. Plen., Comte d'Alcudia, 34, Portland-place.
- Consul-Gen., Don Ignacio Perez de Lema, 46, Lime-street
- Prussia*.—Env. Ex. and Min. Plen., Baron de Bulow, 10, Hereford-st., May-fair
- Consul, A. C. Giese, esq., 11, Red Lion-square
- Netherlands*.—Amb. Ex. and Plen., M. de Falck, 1, Bryanstone-square
- Consul-Gen., John W. May, esq., 6, Jefferies-square, St. Mary Axe
- Sweden*.—Env. Ex. and Min. Plen., Baron de Stierneld, 27, Orchard-street, Portman-square
- Consul, Cha. Tottie, esq., 15, Great St. Helen's.
- Denmark*.—Env. Ex. and Min. Plen., Count de Moltke, 18, Thayer-street, Manchester-square
- Act.-Consul, Mr. J. Campbell, Pinner's-hall, Broad-street.
- Portugal*.—Env. Ex. and Min. Plen., Marquis de Palmella, 74, South Audley-st.
- Consul-General, F. T. Sampayo, 33, Great St. Helen's
- Brazils*.—Env. Ex. and Min. Plen., Baron de Itabayana, 21, Park-crescent, Regent's-park
- Consul-General, M. A. De Paiva, 75, Old Broad-street
- Sardinia*.—Env. Ex. and Min. Plen., Count St. Martin D'Aglié, 11, Hill-st., Berkeley-square
- Consul, J. B. Heath, esq., 31, Old Jewry
- Sicily*.—Env. Ex. and Min. Plen., Count de Ludolf, 84, Gloucester-place
- Bavaria*.—Env. Ex. and Min. Plen., Baron de Cetto, 11, Lower Grosvenor-street
- Switzerland*.—Consul-General A. L. Prevost, esq., 24½, Cateaton-st.
- Wurtemberg*.—Chargé d'Affaires, Count de Mandelsloh, 18, Bentinck-street
- Saxony*.—Chargé d'Affaires, M. Fred. Biederman, 17, Sackville-street
- Hanover*.—Min. of State, Count Munster Meinohvel, 44, Grosvenor-place
- Baden, Hesse Darmstadt, & Hesse Cassel*.—Min. Resident, Baron Langsdorff
- Mecklenburgh Schwerin*.—Consul, Mr. Christopher Kreeft, Bush-lane
- Hanseatic Republics, Lubeck, Bremen, and Hamburg*.—Consul-Gen., James Colquhoun, esq., 13, St. James's-place
- Secretary, Mr. Henry Bremer, Hanseatic Consulate, 29, Bedford-street, Covent-garden

*Frankfort (Free City of).—*Consul, J. Geo. Behrends, esq., 14, Broad-st. build.  
*America.—*Env. Ex. and Min. Plen. — Barbour, esq.  
*Chargé d'Affaires,* W. B. Lawrence, esq., 16, Lower Seymour-street, Portman-square  
*Consul-General,* Thos. Aspinwall, esq.  
*Columbia.—*Env. Ex. and Min. Pl., Señor J. F. Madrid, 33, Portland-place  
*Mexico.—*Consul-General, Mr. Santos Michelena

### LORD MAYOR AND ALDERMEN OF LONDON.

The dates refer to their election as Aldermen.

*Lord Mayor,* Right Hon. W. Thompson, Cheap, 1821  
*Bridge Without* 1785 Sir W. Curtis, Father of the City  
*Bishopsgate.....* 1790 Sir R. C. Glyn  
*Broad Street.....* 1798 Sir J. Perring  
*Portoken.....* 1798 Sir J. Shaw  
*Bread Street.....* 1799 J. Ansley  
*Cornhill.....* 1800 Sir C. Flower  
*Castle Baynard....* 1803 J. J. Smith

*Bassishaw.....* 1804† Sir C. Hunter  
*Dowgate.....* 1805 G. Scholey  
*Candlewick.....* 1807 S. Birch  
*Cripplegate.....* 1807 M. Wood  
*Cordwainer.....* 1807 C. Smith  
*Walbrook.....* 1808 J. Atkins  
*Coleman Street....* 1812 W. Heygate  
*Aldgate.....* 1817 J. T. Thorpe  
*Farringdon Without* 1818 R. Waithman  
*Bridge Within.....* 1821 J. Garratt  
*Queenhithe.....* 1821 W. Venables  
*Billingsgate.....* 1821 A. Brown  
*Tower.....* 1821 M. P. Lucas  
*Recorder,* Newman Knowlys, esq.  
*Common Sergeant,* T. Denman, esq.  
*Langbourn.....* 1823\* J. Key  
*Farringdon Within.* 1823\* J. Crowder  
*Aldersgate.....* 1826\* Sir. P. Laurie  
*Lime Street.....* 1826\* C. Farebrother  
*Vintry.....* 1826

\* \* All before the Recorder have passed the Chair. Those also below the Recorder marked thus\*, have served the office of Sheriff; and thus†, Col. of the City Militia

*Sheriffs,* F. Booth, esq. T. W. Copeland, esq.  
*Chamberlain,* Richard Clark, esq.

### SCOTLAND.

#### PEERS.

Abercorn, <i>Earl of</i> , 1606, Hamilton*†	Dundonald, <i>Earl of</i> , 1669, Cochrane	Lauderdale, <i>Earl of</i> , 1623, Maitland*
Aberdeen, <i>Earl of</i> , 1682, Gordon*	Dunmore, <i>Earl of</i> , 1686, Murray	Lennox, <i>D. of</i> , 1684, Lennox*
Aboyne, <i>Earl of</i> , 1660, Gordon*	Duffus, <i>L.</i> 1650, Sutherland	Leven, <i>E. of</i> , 1641 } Leslie and Melville
Airlie, <i>E. of</i> , 1639, Ogilvy	Dysart, <i>E. of</i> , 1646, Tolle-mache	Lothian, <i>Mar.</i> 1701, Kerr
Argyll, <i>D. of</i> , 1701, Campbell*	Eglinton, <i>Earl of</i> , 1503, Montgomery*	Loudoun, <i>Earl of</i> , 1633, Campbell
Arbuthnot, <i>Viscount</i> , 1641, Arbuthnot	Elgin, <i>E. of</i> , 1633 } Bruce and	Mar, <i>Earl of</i> , 1061, 1435, Erskine
Aston, <i>Lord</i> , 1628, Aston	Kincardine, 16	Montrose, <i>L.</i> 1707, Graham*
Atholl, <i>D. of</i> , 1703, Murray*	Elibank, <i>L.</i> 1645, Murray	Moray, <i>E. of</i> , 1581, Stewart*
Balcarras, <i>E. of</i> , 1651, Lindsay*	Elphinstone, <i>Lord</i> , 1509, Elphinstone	Morton, <i>E. of</i> , 1457, Douglas
Belhaven and Stenton, <i>L.</i> 1649, Hamilton	Errol, <i>E. of</i> , 1452, Hay	Nairne, <i>Lord</i> , 1669, Nairne
Blantyre, <i>Lord</i> , 1606, Stewart	Fairfax, <i>L.</i> 1627, Fairfax	Napier, <i>Lord</i> , 1627, Napier
Breadalbane, <i>Earl of</i> , 1678, Campbell*	Falkland, <i>Vis.</i> 1620, Carey	Newburgh, <i>Lord</i> , 1661, Livingstone
Buccleuch, <i>Duke</i> } Scott, of, 1663 and } Dougl.*	Forbes, <i>Lord</i> , 1440, Forbes	Northesk, <i>E.</i> 1647, Carnegie
Queensberry, 1672 } Monta.	Forrester, <i>L.</i> 1633, Grimston*†	Orkney, <i>E. of</i> , 1695, Hamilton
Buchan, <i>Earl of</i> , 1469, Erskine	Galloway, <i>Earl of</i> , 1523, Stewart*	Portmore, <i>E. of</i> , 1703, Collier
Caithness, <i>Earl of</i> , 1456, Sinclair	Glasgow, <i>E. of</i> , 1703, Boyle*	Queensberry, <i>Mar. of</i> , 1682, Douglas
Carnwath, <i>Earl of</i> , 1639, Dalzell	Gordon, <i>D. of</i> , 1684, Gordon*	Reay, <i>Lord</i> , 1628, McKay
Cassillis, <i>Earl of</i> , 1509, Kennedy*	Gray, <i>Lord</i> , 1445, Gray	Roseberry, <i>Earl of</i> , 1703, Primrose*
Cathcart, <i>L.</i> 1445, Cathcart*	Haddington, <i>Earl of</i> , 1619, Hamilton*	Ruthven, <i>L.</i> 1651, Ruthven
Colville, <i>L.</i> 1609, Colville	Hamilton, <i>Duke of</i> , 1643, Hamilton*	Rollo, <i>Lord</i> , 1651, Rollo
Cranston, <i>L.</i> 1609, Cranston	Home, <i>Earl of</i> , 1604, Home	Roths, <i>E. of</i> , 1457, Leslie
Dalhousie, <i>E. of</i> , 1633, Ramsay*	Hopetoun, <i>E. of</i> , 1703, Hope*	Roxburghe, <i>D. of</i> , 1707, Ker
*Dumfries, <i>E.</i> } Crichton* of, 1633 and }	Kellie, <i>E. of</i> , 1619, Erskine	Saltoun, <i>Lord</i> , 1445, Fraser
Bute, 1703 } Stnart	Kenmure, <i>V.</i> 1633, Gordon	Seafeld, <i>E. of</i> , 1703, Grant
Dunblane, <i>V.</i> 1673, Osborne*	Kinnaird, <i>L.</i> 1682, Kinnaird	Ogilvy
	Kinnoul, <i>E. of</i> , 1623, Hay*	Selkirk, <i>E. of</i> , 1646, Hamilton
	Kintore, <i>E. of</i> , 1677, Keith, Falconar	Sempill, <i>L.</i> 1449, Sempill
	Kirkcudbright, <i>Lord</i> , 1685, Maclellan	Sinclair, <i>L.</i> 1443, Sinclair
		Somerville, <i>L.</i> 1609, Somerville
		Stair, <i>E. of</i> , 1703, Dalrymple
		Stormont, <i>V.</i> 1621, Murray*

Strathallan, *V.* 1636, Drummond  
 Strathmore, *E. of*, 1606, Lyon  
 Sutherland, *E. of*, 1061, 1275, Sutherland  
 Torpichen *L.* 1509 Sandilands  
 Traquair, *E. of*, 1633, Stuart  
 Tweedale, *Marq. of*, 1694, Hay  
 Wemyss and March, *E. of*, 1633, Charteris

\* Marked thus are Peers of the United Kingdom. † Marked thus are Peers of Ireland.

## JUDGES.

## COURT OF SESSION.

*First Division.*

The Lord President—Ch. Hope.

Ld. Craigie, Ld. Balgray, § Ld. Gillies,  
 § Ld. Meadowbank, Ld. Eldin, Ld.  
 Corehouse, § Ld. Newton.

*Second Division.*

§ The Lord Justice Clerk—Boyle.

Ld. Glenlee, § Ld. Pitmilley. § Ld. Allo-  
 way, § Ld. Cringletie, § Ld. Mackenzie,  
 Ld. Medwin.

The Court of Justiciary is composed of  
 those Judges of the Court of Session \*  
 who are marked thus §

\* This is the Chief Criminal Court in Scotland.

## JURY COURT IN CIVIL CAUSES.

The Lord Chief Commissioner Adam,  
 and four Judges of the Court of Session,  
 marked thus §

Scotland is divided into three circuits—  
 namely, the South, West, and North,  
 which take place in spring and autumn.

## COURT OF EXCHEQUER.

Sir Samuel Shepherd, Chief Baron.  
 J. Clerk Rattray, Sir P. Murray, Bt., D.  
 Hume, Barons.

Lord Advocate—Sir W. Rae.  
 Solicitor-General—John Hope, Esq.

## CHURCH.

The CHURCH OF SCOTLAND is governed  
 by one General Assembly, 15 Synods,  
 75 Presbyteries; it contains 899 Pa-  
 rishes, and has 938 Clergymen.

## LORDS, LIEUTENANTS AND SHERIFFS DEPUTE OF SCOTLAND.

<i>County.</i>	<i>Lord Lieutenant.</i>	<i>Sheriff Depute.</i>
Aberdeenshire ....	Duke of Gordon, G.C.B. ....	A. Murray
Argyllshire.....	Duke of Argyle.....	Robert Bruce
Ayrshire .....	Earl of Glasgow .....	Archibald Bell
Banffshire .....	Earl of Fife .....	James Urquhart
Berwickshire ....	Earl of Home .....	William Boswell
Buteshire .....	Marquis of Bute .....	Samuel M'Cormick
Caithness-shire...	Earl of Caithness.....	James Traill
Clackmannanshire	Earl of Mansfield.....	Sir James Moncreiff, Bt.
Cromartysire ....	R. B. Æ. M'Leod.....	Donald M'Leod
Dumbartonshire ..	Duke of Montrose, K.G. ....	J. C. Colquhoun
Dumfries-shire....	Marquis of Queensberry .....	Sir T. Kirkpatrick, Bart.
Edinburghshire ..	D. of Buccleuch & Queensberry	Adam Duff
Elgin and Moray..	Earl of Moray .....	Sir George Abercrombie, Bt.
Fifeshire.....	Earl of Rosslyn .....	Andrew Clephane
Forfarshire .....	Earl of Airlie .....	James L'Amy
Haddingtonshire ..	Marquis of Tweeddale .....	William Horne
Inverness-shire...	Hon. Colonel F. W. Grant ....	W. F. Tytler
Kincardineshire ..	Lord Viscount Arbutnot.....	George Douglas
Kinross-shire ....	Right Hon. William Adam ....	Sir James Moncreiff, Bt.
Kirkcudbright } Stewartry .. }	Earl of Galloway .....	Sir Alexander Gordon
Lanarkshire .....	Duke of Hamilton and Brandon	W. Rose Robinson
Linlithgowshire ..	Earl of Hopetoun .....	John Cay
Nairnshire.....	William Brodie, of Brodie ....	Sir George Abercromby, Bart.
Orkney & Shetland	.....	J. A. Maconochie
Peeblesshire .....	Earl of Wemyss and March....	John Wood
Perthshire .....	Duke of Atholl, K.T.....	Duncan M'Neill
Renfrewshire.....	Archibald Campbell .....	John Colin Dunlop
Ross-shire.....	Sir J. W. Mackenzie, Bart....	Donald M'Leod
Roxburghshire ....	Marquis of Lothian .....	William Oliver, jun.
Selkirkshire .....	Lord Montagu .....	Sir Walter Scott
Stirlingshire .....	Duke of Montrose, K.G. ....	Ranald Macdonald
Sutherland .....	Marquis of Stafford, K.G. ....	Hugh Lumsden
Wigtonshire .....	Earl of Galloway.....	James Walker

## IRELAND.

## THE MINISTRY.

Lord Lieutenant, Marq. of Anglesea  
 Lord High Chancellor, Rt. Hon. Sir A.  
 Hart, Knt.

Chief Secretary, Lord F. L. Gower.  
 Vice-Treasurer of the Exchequer, Right  
 Hon. Sir G. Fitzgerald Hill, bt.  
 Attorney-General, Right Hon. Henry Joy  
 Solicitor-General, John Doherty, esq.

## PEERS.

- Aldborough, *Earl*, 1777, Stratford  
 Allen, *Vis.* 1717  
 Annesley, *Earl*, 1789  
 Antrim, *Countess*, 1785  
 \*Arden, *L.* 1770, Perceval  
 Armagh, *Arch.* 1822, J. G. De la Poer Beresford  
 \*Armagh, *Earl of*, 1793, Prince Ernest Augustus  
 Arran, *Earl*, 1762, Gore  
 Ashbrook, *V.*, 1751, Flower  
 Ashtown, *Ld.*, 1800, Treach  
 Athlone, *L.*, 1691, DeGinkell  
 \*Auckland, *L.*, 1789, Eden  
 Avonmore, *Vis.*, 1800, Yelverton  
 Aylmer, *Lord*, 1718  
 Bandon, *Earl of*, 1800, Bernard  
 Bangor, *Vis.*, 1781, Ward  
 Bantry, *E. of*, 1816, White  
 Barrington, *Vis.*, 1720  
 Belmore, *E. of*, 1797, Corry  
 \*Besborough, *Earl of*, 1739, Ponsonby  
 Blayney, *Lord*, 1621  
 Blesinton, *E. of*, 1816, Gardiner  
 Bloomfield, *Lord*, 1825  
 Boyne, *Vis.*, 1717, Hamilton  
 Brandon, *L.*, 1753, Crosbie  
 Bridport, *Ld.*, 1794, Hood  
 Caledon, *Earl of*, 1800, Alexander  
 Carbery, *Lord*, 1715, Freke  
 Carhampton, *Earl of*, 1785, Olmuis  
 Carrick, *E. of*, 1748, Butler  
 \*Carrington, *L.*, 1796, Smith  
 Carysfort, *E. of*, 1739, Proby  
 Cashel, *Arch.* of, 1822, Richard Lawrence  
 Castlemain, *V.*, 1822, Handcock  
 Castle Stewart, *E. of*, 1800  
 Cavan, *E. of*, 1647, Lambart  
 Charlemont, *Earl of*, 1763, Caulfield  
 Charleville, *E. of*, 1806, Bury  
 Chetwynd, *Vis.*, 1717  
 \*Cholmondeley, *Vis.*, 1661  
 \*Clancarty, *E. of*, 1803, Trench  
 Clanmorris, *Lord*, 1800, Bingham  
 \*Clanricarde, *Mar. of*, 1825, De Burgh  
 \*Clanwilliam, *E. of*, 1776, Meade  
 \*Clare, *E. of*, 1795, Fitzgibbon  
 Clarina, *L.* 1800, Massey  
 Clermont, *Vis.*, 1776, Fortescue  
 Clifden, *Vis.*, 1781, Ellis  
 \*Clive, *Lord*, 1762  
 Clogher, *Bishop of*, 1822, Rob. Ponsonby  
 Clonbrock, *L.*, 1790, Dillon  
 Cloncurry, *L.*, 1789, Lawless  
 Clonfert and Kilmacduagh, *B. of*, 1804, Chri. Butson  
 Clonmel, *E. of*, 1793, Scott  
 Cloyne, *Bishop of*, 1826, John Brinkley  
 \*Connaught, *Earl of*, 1764, Prince Wm. Frederick  
 \*Conway, *Lord*, 1703  
 \*Conyngham, *Mar. of*, 1816  
 Cork, *Bishop of*, 1807, Thos. St. Lawrence  
 \*Cork and Ossory, *Earl of*, 1620, Boyle  
 \*Courtoun, *E. of*, 1762, Stopford  
 Cremorne, *L.* 1797, Dawson  
 Crofton, *Lord*, 1797  
 \*Darnley, *E. of*, 1725, Bligh  
 De Blaquiere, *Lord*, 1800  
 Decies, *L.* 1812, Beresford  
 Derry, *B. of*, 1803, W. Knox  
 Desart, *Earl of*, 1793, Cuffe  
 Desmond, *Earl of*, 1622, Fielding  
 De Vesci, *Vis.* 1776, Vesey  
 \*Digby, *Lord*, 1620  
 Dillon, *Vis.* 1621, Dillon Lee  
 \*Donegal, *Marquis of*, 1791, Chichester  
 Doneraile, *Vis.* 1785, St. Leger  
 \*Donoughmore, *E. of*, 1800, Hutchinson  
 Down, *Bish. of*, 1823, Rich. Mant  
 \*Downe, *Vis.* 1630, Dawnay  
 Downes, *Lord*, 1822, Burgh  
 Downshire, *M. of*, 1789, Hill  
 \*Drogheda, *Marq. of*, 1791, Moore  
 Dromore, *Bishop of*, 1820, James Sanrin  
 Dublin, *Archb. of*, 1822, Wm. Magee  
 Dufferin, *L.* 1800, Blackwood  
 Dunally, *L.* 1800, Prittie  
 Dunboyne, *L.* 1541, Butler  
 Dungannon, *Vis.*, 1766, Hill  
 Trevor  
 Dunsany, *L.* 1461, Plunkett  
 Dunraven, *E. of*, 1822, Quin  
 \*Egmont, *Earl of*, 1733, Perceval  
 Elphin, *B. of*, 1820, J. Leslie  
 \*Ely, *Mar. of*, 1800, Loftus  
 \*Enniskillen, *E. of*, 1789, Cole  
 Erne, *E. of*, 1789, Creighton  
 Farnham, *L.* 1756, Maxwell  
 Ferrard, *V.* 1797, Skeffington  
 Ffrench, *Lord*, 1793  
 \*Fife, *Earl of*, 1759, Duff  
 Fingall, *E. of*, 1628, Plunkett  
 Fitzgerald, *Baroness*, 1826  
 \*Fitzwilliam, *Earl*, 1717  
 Fitzwilliam, *Viscount*, 1629  
 Frankfurt, *Vis.*, 1816, De Montmorency  
 \*Gage, *Viscount*, 1720  
 Galway, *V.* 1727, Monkton-Arundell  
 \*Gardner, *Lord*, 1800  
 Garvagh, *L.* 1818, Canning  
 Glengall, *E. of*, 1816, Butler  
 Gormanstown, *Vis.*, 1478, Preston  
 Gort, *Vis.*, 1816, Vereker  
 Gosford, *E. of*, 1806, Acheson  
 \*Granard, *E. of*, 1684, Forbes  
 \*Grandison, *V.*, 1620, Villiers  
 Graves, *Lord*, 1794  
 \*Grimston, *Viscount*, 1719  
 Harberton, *V.* 1791, Pomeroy  
 Hartland, *L.* 1800, Mahon  
 Hawarden, *Vis.*, 1793, Maude  
 Headfort, *Marquis of*, 1800, Taylor  
 Headly, *Lord*, 1797, Winn  
 Henley, *Lord*, 1799, Eden  
 Henniker, *Lord*, 1800  
 \*Hood, *Lord*, 1782  
 Hotham, *Lord*, 1797  
 Howden, *L.*, 1819, Cradock  
 Howth, *Earl of*, 1767, St. Lawrence  
 Huntingfield, *Lord*, 1796, Vaneck  
 \*Keith, *Baroness*, 1797  
 Kenmare, *E. of*, 1800, Browne  
 Kensington, *Lord*, 1776, Edwards  
 \*Kerry, *E. of*, 1772, Petty  
 Kilclare, *Bishop of*, 1804, C. D. Lyndsay  
 Kilkenny, *E. of*, 1793, Butler  
 Killala, *Bishop of*, 1810, J. Verschoyle  
 Killaloe, *Bishop of*, 1823, R. Ponsonby  
 Kilmaine, *L.*, 1789, Browne  
 Kilmore, *B. of*, 1802, G. De la Poer Beresford  
 Kilmorey, *Earl of*, 1822, Needham  
 Kilwarden, *Vis.* 1800, Wolfe  
 Kingsland, *Viscount*, 1646, Barnewall  
 \*Kingston, *E. of*, 1763, King  
 Kinsale, *L.*, 1181, De Courcy  
 Landaff, *E. of*, 1797, Mathew  
 Langford, *L.*, 1800, Rowley  
 Lanesborough, *E. of*, 1756, Butler  
 Leighlin, *Bishop of*, 1822, Thomas Elrington  
 \*Leinster, *Duke of*, 1766, Fitzgerald  
 Leitrim, *E. of*, 1795, Clements  
 Lifford, *Vis.*, 1781, Hewitt  
 Limerick, *B. of*, 1822, J. Jebb  
 \*Limerick, *E. of*, 1803, Pery  
 Lisburne, *Earl of*, 1776, Vaughan  
 Lisle, *Lord*, 1758, Lysaght  
 Lismore, *Viscount*, 1806, O'Callaghan  
 Listowel, *E. of*, 1822, Hare  
 Londonderry, *Mar. of*, 1816, Stewart  
 \*Longford, *Earl of*, 1785, Pakenham  
 Lorton, *Vis.*, 1806, King  
 Louth, *Lord*, 1541, Plunkett  
 Lucan, *E. of*, 1795, Bingham



- \***Lamley, Vis.** 1623, **Saunderson**  
**Ludlow, Earl,** 1760  
**Macdonald, Lord,** 1776  
**Massereene, Viscountess,** 1660, **Skeffington**  
**Massy, Lord,** 1776  
**Mayo, E. of,** 1785, **Bourke**  
**Meath, Bis. of,** 1823, **Nath. Alexander**  
**Meath, E. of,** 1627, **Brabazon**  
**\*Midleton, V.** 1717, **Brodrick**  
**Mexborough, E. of,** 1766, **Savile**  
**\*Melbourne, V.** 1781, **Lamb**  
**Milltown, E. of,** 1763, **Leeson**  
**\*Moira, E. of,** 1762, **Hastings**  
**Molesworth, Viscount,** 1716  
**Mount-Cashel,** 1781, **Moore**  
**Mountmorres, Vis.** 1763, **Montmorency**  
**Mountmorris, Earl of,** 1793, **Annesley**  
**Mountsandford, Lord,** 1800  
**\*Mulgrave, L.** 1767, **Phipps**  
**Muncaster, Lord,** 1783, **Pennington**  
**\*Munster, Earl of,** 1789, **Pr. Wm. Henry**  
**Muskerry, L.** 1781, **Deane**  
**Newborough, L.** 1776, **Wynar**  
**Norbury, E. of,** 1827, **Toler**  
**Normanton, E. of,** 1106, **Agar**  
**Northland, Vis.** 1791, **Knox**  
**Norwood, Lord,** 1797, **Toler**  
**\*Marked thus are Peers of the United Kingdom. † Marked thus are Peers of Scotland.**
- \***Nugent, E.** 1776, **Temple**  
**Nugent, L.** 1800, **Grenville**  
**O'Neill, Earl,** 1800  
**Ongley, Lord,** 1776  
**\*Ormonde, M. of,** 1825 **Butler**  
**Ossory, Bishop of,** 1813, **Robert Fowler**  
**Palmerston, V.** 1722, **Temple**  
**Portarlington, E. of,** 1785, **Dawson**  
**Powerscourt, V.** 1743, **Wingfield**  
**Radstock, Lord,** 1800, **Waldegrave**  
**Rancliffe, L.** 1795, **Parkins**  
**Ranelagh, V.** 1628, **Jones**  
**Raphoe, Bishop of,** 1822, **W. Bissett**  
**Rathdowne, Earl of,** 1822, **Monck**  
**Rendlesham, Lord,** 1806, **Thellusson**  
**Riversdale, L.** 1783, **Tonson**  
**\*Roden, E. of,** 1771, **Jocelyn**  
**Rokeby, L.** 1777, **Robinson**  
**Rosse, E. of,** 1805, **Parsons**  
**Rossmore, L.** 1796, **Westenra**  
**\*St. Helens, L.** 1791, **Fitzherbert**  
**Sefton, E. of,** 1771, **Molyneux**  
**\*Shannon, E. of,** 1756, **Boyle**  
**\*Sheffield, Earl of,** 1816, **Holroyd**  
**\*Sherard, Lord,** 1627  
**\*Sligo, M. of,** 1800, **Browne**
- \***†Strabane, V.** 1701, **Hamilton**  
**Southwell, Vis.** 1776  
**\*Strangford, Vis.** 1621, **Smythe**  
**Taafe, Vis.** 1623  
**Teignmouth, L.** 1797, **Shore**  
**Templetown, V.** 1806, **Upton**  
**\*Thomond, Mar. of,** 1800, **O'Brien**  
**Trimelston, L.** 1461, **Barnewall**  
**Tuam, Arch. of,** 1819, **P. Le Poer Trench**  
**Tyrconnel, Earl of,** 1761, **Carpenter**  
**Ventry, Lord,** 1800, **Mullins**  
**Wallscourt, L.** 1800, **Blake**  
**Waterford, Bp. of,** 1813, **Richard Bourke**  
**\*Waterford, Earl of,** 1661, **Talbot**  
**\*Waterford, Mar. of,** 1789, **Beresford**  
**Waterpark, Lord,** 1792, **Cavendish**  
**\*Wellesley, Mar. of,** 1799  
**\*Westcote, Lord,** 1776, **Lytleton**  
**Westmeath, Mar. of,** 1822, **Nugent**  
**Wicklow, Earl of,** 1793, **Howard**  
**Winterton, Earl of,** 1766, **Turnour**

## JUDGES IN IRELAND.

Thus † marked, Commissioners to hear and determine Causes in Chancery in the Absence of the Lord Chancellor; a Judge to be always one.

## COURT OF CHANCERY.

**Lord Chancellor, Rt. Hon. Sir Anthony Hart, Knt.**  
**Master of the Rolls, Rt. Hon. Sir Wm. M'Mahon, Bart.**

## COURT OF KING'S BENCH.

**Lord Chief Justice and Judges.—† Rt. Hon. Charles K. Bushe. † Hon. Rich. Jebb. † Hon. Charles Burton. † Hon. Thos. B. Vandeleur.**

## COURT OF COMMON PLEAS.

**Lord Chief Justice and Judges.—† Lord Plunket. † Hon. Arthur Moore. † Hon. William Johnson. † Hon. Robert Torrens.**

## COURT OF EXCHEQUER.

**Chancellor of the Exchequer, Rt. Hon. Henry Goulburn.**  
**Lord Chief Baron, † Rt. Hon. Standish O'Grady.**  
**Barons.—† Hon. Sir W. C. Smith, Bart. † Hon. James M'Clelland. † Hon. R. Pennefather.**

## CUSTODES ROTULORUM.

**Antrim, Marquis of Hertford.**  
**Armagh, Earl of Gosford.**  
**Carlow, Wm. Browne, Esq.**

**Cavan, Nathaniel Sneyd, Esq.**  
**Clare, Marquis Conyngham.**  
**Cork, Earl of Shannon.**  
**Donegall, Earl of Leitrim.**  
**Down, Marq. of Londonderry.**  
**Dublin, Sir Comp. Domville, Bt.**  
**Fermanagh, Earl of Enniskillen.**  
**Galway, Earl of Clancarty.**  
**Kerry, James Crosbie, Esq.**  
**Kildare, Duke of Leinster.**  
**Kilkenny, Marq. of Ormonde.**  
**King's County, Earl of Rosse.**  
**Leitrim, Earl of Leitrim.**  
**Limerick, Earl of Dunraven.**  
**Londonderry, Marq. of Londonderry.**  
**Longford, Viscount Forbes.**  
**Louth, Earl of Roden.**  
**Mayo, James Cuff, Esq.**  
**Meath, Marquis Wellesley.**  
**Monaghan, Lord Rossmore.**  
**Qu. Co. Lord Maryborough.**  
**Roscommon, Viscount Lorton.**  
**Sligo, Owen Wynne, Esq.**  
**Tipperary, Hon. F. A. Prittie.**  
**Tyrone, Earl of Belmore.**  
**Waterford, Lord G. Beresford.**  
**Westmeath, Earl of Longford.**  
**Wexford, Marq. of Ely.**  
**Wicklow, Earl of Meath.**

## GOVERNORS OF COUNTIES.

**Antrim, Marq. of Donegall and Earl O'Neil.**  
**Armagh, Earl of Gosford.**  
**Carlow, John Staunton Rochfort, Wm. D 4**

- Brown, Hen. Bruen, Lord Downes, and T. Kavanagh, Esqrs.  
*Cavan*, Lord Farnham.  
*Clare*, Hon. Sir F. N. Burton, Rt. Hon. William V. Fitzgerald.  
*Cork*, Lord Riversdale, Marquis of Thomond, Viscount Doneraile, Earl of Kingston, Will. Hodder, Esq.  
*Donegall*, Earl of Leitrim, Marquis Conyngham, Sir Sam. Haycs, Bart.  
*Down*, Lord Dufferin, Rt. Hon. Rt. Ward, Marquis of Londonderry.  
*Dublin*, George Vesey, Thomas White, Esqrs., and Sir Comp. Domville, Bart.  
*Fermanagh*, Gen. Mervyn Archdall, Earl of Erne, Earl of Enniskillen, Marq. of Ely.  
*Galway*, Earl of Clancarty, Visct. Gort.  
*Kerry*, James Crosbie, Esq.  
*Kildare*, Duke of Leinster.  
*Kilkenny*, Marquess of Ormonde.  
*King's County*, Earl of Rosse, T. Bernard, Esq.  
*Leitrim*, Walter Jones, Esq., Hen. Jn. Clements, Esq.  
*Limerick*, Hon. R. Fitz-Gibbon.
- Londonderry*, Marquis of Londonderry.  
*Longford*, Earl of Granard.  
*Louth*, Lord Oriel, Viscount Ferrard.  
*Mayo*, Dominick G. Browne, Esq., Marq. of Sligo, James Cuff, Esq.  
*Meath*, Marquis of Headfort.  
*Monaghan*, Lord Rossmore, Chas. Powel Leslie, Esq.  
*Queen's County*, Lord Maryborough, and Thomas Crosby, Esq.  
*Roscommon*, Lord Hartland, Viscount Lorton, and Arthur French, Esq.  
*Sligo*, Owen Wynne, Esq., Joshua E. Cooper, Esq., John Irwin, Esq.  
*Tipperary*, Richard Pennefather, Esq., Stephen Moore, Esq., Earl of Glengal.  
*Tyrone*, Earl of Belmore, Earl of Caledon, Earl of Blesinton.  
*Waterford*, Lord George Beresford.  
*Westmeath*, Visc. Castlemaine, Marquis of Westmeath.  
*Wexford*, Earl of Mountnorris, Marquis of Ely, Earl of Courtoun.  
*Wicklow*, Earl of Wicklow, Hon. Hugh Howard, Earl of Aldborough.

## II.—COMMERCE.

### BANK DIRECTORS.

- Governor*, Samuel Drewe, Esq.  
*Deputy*, John H. Palmer, Esq.  
 John Bowden, Esq., Cornelius Buller, Esq., John Cockerell, Esq., William Cotton, Esq., George Dorrien, Esq., Samuel Hibbert, Esq., William Manning, Esq., William Mellish, Esq., Humph. St. John Mildmay, Esq., Wm. Mitchell, Esq., James Morris, Esq., George Warde Norman, Esq., John Henry Pelly, Esq., Charles Pole, Esq., Henry Porcher, Esq., Richard Mee Raikes, Esq., John Baker Richards, Esq., Wm. R. Robinson, Esq., Simon Taylor, Esq., And. H. Thompson, Esq., Wm. Thompson, Esq., Samuel Thornton, Esq., Wm. Ward, Esq., Thomas Warre, Esq.

### EAST-INDIA COMPANY.

#### *Directors.*

- Chairman*, William Astell, Esq.  
*Deputy*, John Loch, Esq.  
 Geo. Smith, Esq., Sweeney Toone, Esq., Rich. Chicheley Plowden, Esq., John Bebb, Esq., James Pattison, Esq., Campbell Majoribanks, Esq., Sir Geo. Aber. Robinson, Bt., Wm. Wigram, Esq., Wm. Stanley Clarke, Esq., John Thornhill, Esq., George Raikes, Esq., C. E. Prescott, Esq., Chas. Mills, Esq., John Baillie, Esq., John Masterman, Esq., John P. Muspratt, Esq., Sir R. T. Farquahar, Bart., Henry St. George Tucker, Esq., James Stuart, Esq., Hen. Alexander, Esq., James R. Carnac, Esq., James L. Lushington, Esq.

### BANKERS IN LONDON.

- ASHLEY, James, 135, Regent-street  
 Attwoods, Messrs. 27, Gracechurch-street

- Barelay, Tritton, Bevan, and Co. 54, Lombard-street  
 Barnard, Dimsdale, & Barnard, 50, Cornhill  
 Barnets, Hoare, and Co. 62, Lombard-st.  
 Bond, Sons, and Pattisall, 2, 'Change-alley  
 Bosanquet, Pitt, Anderdon, and Franks, 3, Lombard-street  
 Bouverie and Lefevre, 35, Craven-street  
 Brown, Janson, and Co. 34, Abchurch-lane  
 Bruce, Simson, and Co. 9, Austinfriars  
 Call (Sir Will. Pratt), Arnold, and Marten, 25, Old Bond-street  
 Campbell and Co. Regent-street  
 Child and Co. 1, Fleet-street  
 Cockburns and Co. Whitehall  
 Cockerell, Trail and Co. 8, Austin Friars  
 Cocks, Cocks, and Biddulph, 43, Charing Cr.  
 Coutts and Co. 59, Strand  
 Cunliffe, Brooks, Cunliffe, and Co. 24, Bucklersbury  
 Curries and Co. 29, Cornhill  
 Curtis (Sir W. Bt.), Robarts, and Curtis, 15, Lombard-street  
 Denison, Jos. and Co. 106, Fenchurch-street  
 Dixon, Langdale, Dixon, and Brooks, 25, Chancery-lane  
 Dorrien, Magens, Dorrien, Mello, and Co. 22, Finch-lane  
 Drewett and Fowler, 60, Old Broad-street  
 Drummond, Andrew, B. John, Henry and Co. 49, Charing Cross  
 Esdaile (Sir J. Kt.), Esdaile, Esdaile, Hammet and Co. 21, Lombard-street  
 Frys and Chapman, St. Mildred's court, Poultry  
 Fuller (R. and G.), and Co. 84, Cornhill  
 Gill (T.) and Feltham, 42, Lombard-street  
 Glyn (Sir R. Bart.), C. Mills, T. Halifax, and Co. 67, Lombard-street  
 Gosling (F. W.), W. E., R., and Sharpe, 19, Fleet-st.  
 Grote, Prescott, and Grote, 62, Thread-needle-street

Hammersleys, Greenwood, Brooksbank, & Clarke, 76, Pall Mall  
 Hanbury, Taylor, & Lloyds, 60, Lombard-st.  
 Hankey (A. K.) W. A. and T. 7, Fenchurch-st.  
 Herries, Farquhar, Halliday, Davidson, and Chapman, 16, St. James's-street  
 Hoare, Henry, Henry-Hugh, Charles, and Henry-Merrick Hoare, 37, Fleet-street  
 Hopkinson, George, Cæsar, Charles, and Edmund, 3, Regent-street  
 Jones, John, 41, West Smithfield  
 Jones, Lloyd, and Co. 43, Lothbury  
 Kay (Sir W.), Price, Marryatt, and Coleman, 1, Mansion House-street  
 Kinloch (G. F.) & Sons, 1, New Broad-st.  
 Ladbroke, Kingscote, and Gilman, Bank-buildings  
 Lees, Brassey, Farr & Lee, 71, Lombard-st.  
 Lubbock (Sir J. W., Bart.), Forster, Clarke, and Co. 11, Mansion House-street  
 Marten, Call, Arnold, and Marten, 25, Old Broad-street  
 Martin, Stone, & Stone, 68, Lombard-st.  
 Masterman, Peters, Mildred, Masterman, & Co. 35, Nicholas-lane, Lombard-street  
 Maude, J. and T., and Hallett, 13, Great George-street, Westminster  
 Minet, Stride, and Co. Austin Friars  
 Morlands and Co. 50, Pall Mall  
 Pares and Heygates, 25, New Bridge-street, Blackfriars  
 Pocklington and Lacy, 60, West Smithfield  
 Praeds, Mackworth, Newcombe, and Fane, 189, Fleet-street  
 Puget, Bainbridge, and Co. 12, St. Paul's Churchyard  
 Ransom and Co. 1, Pall Mall, East  
 Remington, Stephenson, Remington, and Toulmin, 69, Lombard-street  
 Rogers, Towgood, Olding, Sharpe, and Boycott, 22, Clement's-lane, Lombard-street  
 Sansom and Postlethwaite, 65, Lombard-st.  
 Scott, Williams, and Co. Cavendish-square  
 Sharpe and Sons, 8, West Smithfield  
 Smith, Payne, & Smiths, 1, Lombard-street  
 Snow (Robert) and Co. 217, Strand  
 Spooner, Attwoods, and Co. 27, Grace-church-street  
 Stevenson and Salt, 20, Lombard-street  
 Twining, Richard, George and John Aldred, Devereux-court, Strand  
 Veres, Ward, and Co. 77, Lombard-street  
 Weston, Young, and Bostock, 37, High-st. Borough  
 Weston, John, 81, Lombard-street  
 Whitmore, Wells, and Whitmore, 24, Lombard-street  
 Williams, Deacon, Labouchere, and Co. 20, Birchin-lane  
 Willis, Percival, and Co. 76, Lombard-st.  
 Wright (Thos.) and Co. 5, Henrietta-street, Covent-garden.  
 Young (Abraham) and Son, 11, Smithfield

## ARMY AGENTS.

Armit, Borough, and Co. Leinster-street, Dublin  
 Ashley, James, 135, Regent-street  
 Atkinson, J. Ely-place, Dublin  
 Brent, Timothy, Stable-yard, St. James's  
 Brooksbank and Morland (for invalids), 19, Craven-street, Strand  
 Browell, Henry, Stable-yard, St. James's  
 Cane, Rich. and Co. Dawson-st. Dublin  
 Collyer, Geo. Sam., Park-place, St. James's  
 Cox & Son (for Marines), 44, Hatton-garden  
 Disney, William, 26, Parliament-street  
 Fitter, Godfrey, 34, Welbeck-street, Mary-le-bone  
 Greenwood, Cox, and Co. Craig's-court, Charing Cross  
 Hopkinson, Charles, Regent-street  
 Juit, G. 44, Warren-street, Fitzroy-square  
 Kirkland, John, 6, Whitehall  
 Lawrie, John, 4, Robert-street, Adelphi  
 Macdonald and Campbell, 6, Regent-street, St. James's  
 Price, William, 34, Craven-street  
 Watson, William, 63, Charlotte-street, Portland-place

## NAVY AGENTS.

Atkins, J. and Son, 7, Walbrook  
 Barnet & King, 37, Essex-street, Strand  
 Barwis, W. H. B. 1, New Boswell-court, Lincoln's Inn  
 Booth and Pettet, 2, Adelphi Terrace  
 Brothers & Leith, 3, New-court, Broad-st  
 Chalmers, John, 4, Adam's-ct., Old Broad-st.  
 Chard, W. and E. 3, Clifford's Inn  
 Chippendale, John, 10, John-st. Adelphi  
 Clementson, Charles, 8, Adelphi-terrace  
 Collier, T. 3, Brick-court, Temple  
 Cooke, Halford, & Son, 41, Norfolk-st. Strand  
 Copland, John, 23, Surrey-street, Strand  
 Dufaur, Joseph, 13, Clement's Inn  
 Evans and Eyton, 22, George-st. Adelphi  
 Goode & Clarke, 15, Surrey-street, Strand  
 Hinxman, J. 72, Great Russell-st. Bloomsbury  
 Holmes, Wm. 3, Lyon's Inn  
 Levy, J. Commercial Chambers, Minories  
 M'Inerheney, 8, Adelphi Terrace  
 Maude, J. and T. 14, Great George-street, Westminster  
 Muspratt, J. P. 9, New Broad-street  
 Ommanney and Son, Sir F. M. 22, Norfolk-street, Strand  
 Sholl, Robert, 7, Clement's Inn  
 Stilwell, T. J., & T., 22, Arundel-st. Strand  
 Woodhead, J. 8, James-street, Adelphi

## FOR MARINES.

Cox and Son, 44, Hatton-garden  
 Kempster, W. H. 37, Craven-st. Strand  
 Madden, Captain, Portsmouth  
 Rice, Mr. Poland-street

## III.—E D U C A T I O N.

## UNIVERSITY OF OXFORD.

*Elected*  
 Chancellor.—Rt. Hon. W. Wyndham,  
 Lord Grenville, D.C.L., F.R.S. .... 1809  
 High Steward.—Rt. Hon. John Earl  
 of Eldon, D.C.L., F.R.S. .... 1801

*Deputy High Steward*—James Blackstone, D.C.L. 1801  
*Vice-Chancellor*.—Jno. Collier Jones, D.D., Rector of Exeter  
*Pro-Vice-Chancellors*.—The Rev. G. Rowley, D.D. Master of University  
 D 5

- Col. The Rev. R. Jenkyns, D.D.,  
Master of Balliol Col. The Rev.  
A. T. Gilbert, D.D. Principal of  
Brazen-nose College. The Rev. G.  
W. Hall, D.D., Master of Pembroke  
Col.
- Curators of the Theatre.*—Whittington  
Landon, D.D. Provost of Worcester  
College. . . . . 1806
- Michael Marlow, D.D. Pres. of St.  
Johu's College. . . . . 1808
- Assessor.*—J. D. Macbride, D.C.L.  
Prin. of Magdalen Hall. . . . . 1812
- Colleges and Halls, and present Heads of  
Colleges.* *Elected*
- University, G. Rowley, D.D., F.R.S. 1821
- Balliol, R. Jenkyns, D.D. . . . . 1819
- Merton, R. Marsham, D.C.L. . . . . 1826
- Exeter, J. C. Jones, D.D. . . . . 1819
- Oriel, Edw. Hawkins, D.D. . . . . 1828
- Queen's, John Fox, D.D. . . . . 1827
- New Col., P. N. Shuttleworth, D.D. 1822
- Lincoln Col. E. Tatham, D.D. . . . . 1792
- All Souls, Lewis Sneyd, M.A. . . . . 1827
- Magdalen, M. J. Routh, D.D. . . . . 1791
- Brazen-nose, A. T. Gilbert, D.D. . . . . 1822
- Corpus Christi, T. E. Bridges, D.D. 1823
- Christ-Church, S. Smith, D.D. . . . . 1824
- Trinity, J. Ingram, D.D. . . . . 1824
- St. John's, Philip Winter, D.D. . . . . 1828
- Jesus, Henry Foulkes, D.D. . . . . 1817
- Wadham, W. Tournay, D.D. . . . . 1806
- Pembroke, G. W. Hall, D.D. . . . . 1809
- Worcester, Dean of Exeter, D.D.  
Provost. . . . . 1795
- St. Mary Hall, John Dean, D.D. . . . . 1815
- Magdalen Hall, J. D. Macbride, D.C.L. 1813
- New-Inn Hall, J. Blackstone, D.C.L. 1803
- St. Alban Hall, Rich. Whateley, D.D. 1825
- St. Edmund Hall, Ant. Grayson, D.D. 1824
- Proctors.*—Wm. A. Bouverie, M.A., Fellow  
of Merton. And C. L. Swainson, M.A.,  
Fellow of St. John's.
- Pro-Rectors.*—H. W. Buckley, M.A., Fel-  
low of Merton. G. Tyndall, M.A., Fel-  
low of Merton. H. A. Woodgate, M.A.,  
Fellow of St. John's. E. P. New, M.A.,  
Fellow of St. John's.
- Masters of the Schools.*—J. M. Chapman,  
M.A. Fellow of Balliol. J. Williams, M.A.  
Student of Christ Church. F. J. Parsons,  
M.A., Demy of Magdalen.
- PROFESSORS.* *Elected*
- Regius Divinity.*—Bishop of Oxford. 1822
- Reg. Hebrew.*—(Vacant)
- Regius Greek.*—Rev. T. Gaisford, M.A. 1811
- Reg. Civil Law.*—J. Phillimore, D.C.L. 1809
- Reg. Med.*—J. Kidd, M.D., F.R.S. 1822
- Reg. Mod. Hist.*—E. Nares, D.D. . . . 1813
- Regius Botany.*—G. Williams, D.M.  
F.L.S. . . . . 1796
- Margaret Divinity.*—G. Fausset, D.D. 1798
- Saville's Astron.*—S. P. Rigaud, M.A.  
F.R.S. . . . . 1827
- Sav.'s Geom.*—B. Powell, M.A., F.R.S. 1827
- Natural Philosophy.*—Rev. G. L.  
Cooke, B.D. . . . . 1810
- Camden's Hist.*—Edw. Cardwell, B.D. 1825
- Laud's Arabic.*—W. Knatchbull, D.D. 1823
- Lord Almoner's Arabic.*—J. D. Mac-  
bride, D.C.L. . . . . 1813
- Experimental Philosophy.*—S. P. Ri-  
gaud, M.A. F.R.S. . . . . 1810
- Poetry.*—Rev. H. H. Milman, M.A. . 1821
- Viner's Com. Law.* P. Williams, D.C.L. 1824
- Lord Litchfield's Clinical Medicine.*—  
R. Bourne, M.D. . . . . 1824
- Anglo Saxon.*—A. Johnson, M.A. . . . 1827
- Aldrich's Anatomy.*—J. Kidd, M.D.  
F.R.S. . . . . 1822
- Aldrich's Medicine.*—J. A. Ogle, M.D.  
F.R.S. . . . . 1824
- Aldrich's Chemistry.*—C. G. B. Dau-  
beny, M.D. . . . . 1822
- Mineralogy.* } Rev. W. Buckland, { 1813  
*Geology.* } D.D., F.R.S. . . . { 1818
- Political Econ.*—N. W. Senior, M.A. 1825
- Bampton Lecturer.*—Rev. E. Burton, M.A.
- Music.*—W. Crotch, Mus. Doc. . . . . 1797
- UNIVERSITY OFFICERS.*
- Pub. Orator.*—Rev. W. Crowe, B.C.L. 1794
- Keeper of Bodleian Library.*—Rev.  
B. Bandinel, D.D. . . . . 1813
- Under Keepers.*—Philip Bliss, D.C.L. 1822
- Charles H. Cox, M.A. . . . . 1826
- Keep. of the Archives.*—P. Bliss, D.C.L. 1826
- Keeper of Ashmole's Museum.*—J. S.  
Duncan, M.A. . . . . 1823
- Radcliffe Lib.*—G. Williams, M.D.  
F.L.S. . . . . 1810
- University Counsel.*—J. B. Bosanquet, M.A.  
Christ Church. G. R. Cross, M.A. Bra-  
zen-nose.
- Registrar.*—P. Bliss, D.C.L. F.S.A. "  
St. John's. . . . . 1824
- Proctors in the University Court.*—W.  
Brown, A.M., and J. Bardgett, A.M.
- Solicitor.*—Baker Morrell, Esq.
- Esquire Bedels.*—R. Hall, B.C.L., G. V.  
Cox, M.A., and T. H. Bobart.
- Yeomen Bedels.*—J. Holiday, J. Brown,  
and W. Taman.
- Clerk of the University.*—W. Goodenough  
Dodd.
- Verger.*—Richard Norris.
- Members of Convocation . . . . . 2365
- Members on the Books . . . . . 5009
- UNIVERSITY OF CAMBRIDGE.**
- Elected*
- Chancellor.*—His R. H. Duke of Glou-  
cester, D.C.L., F.R.S., Trin. Col. . 1811
- High Steward.*—E. of Hardwicke, K.G.  
D.C.L., F.R.S., Queen's Col. . . . . 1806
- Vice-Chancellor.*—Gilbert Ainslie, D.D.,  
Master of Pembroke.
- Counsl.*—Sir N. C. Tindal, kt. M.A. Trin.  
Col. Thomas Starkie, M.A., Downing  
Col. E. H. Alderson, M.A. Caius Col.
- Commissary.*—F. Pollock, M.A., F.R.S.  
Trin. . . . . 1824
- Assessor.*—W. Hunt, M.A. King's. . . . 1805
- Colleges and Halls, and present Heads of  
Colleges.* *Elected*
- Peter-House, F. Barnes, D.D. Master 1783
- Clare-Hall, W. Webb, D.D. F.L.S.  
Master . . . . . 1815
- Pembroke-Hall, Gilbert Ainslie, D.D.
- Gonville and Caius, M. Davy, D.D.  
F.R. & A.S. Master . . . . . 1803
- Trin. Hall, T. Le Blanc, D.C.L. Master 1815
- Corpus Christi, J. Lamb, B.D. Master 1822

King's, G. Thackeray, D.D. Provost.	1814
Queen's, H. Godfrey, D.D. President	1820
Catharine Hall, J. Proctor, D.D. Master	1799
Jesus, Wm. French, D.D. Master...	1820
Christ's, Bp. of Lincoln, F.R.S., Mast.	1814
St. John's, Dean of Ely, Master. ....	1815
Magdalen, Hon. G. N. Grenville, M.A.	
Master.....	1813
Trinity, C. Wordsworth, D.D. Master	1820
Emmanuel, R. Towerson Cory, D.D.	
Master.....	1797
Sidney Sussex, Wm. Chafy, D.D.	
Master.....	1813
Downing, Wm. Frere, D.C.L. Master	1812
Sen. Proctor.—A. M. Wale, M.A., St.	
John's Col.	
Jun. Proctor.—H. Melvill, M.A., St. Peter's	
Col.	
Scrutators.—M. Thackery, M.A., King's	
Col., H.E. Holland, B.D. Emmanuel Col.	
Tarors.—T. S. Turnbull, M.A., Caius	
Col. Joseph Studholme, M.A., Jesus Col.	
Moderators.—Charles Jeffreys, M.A., St.	
John's College, James Bowstead, M.A.,	
Corpus Christi College.	

CAPUT.

Every University-Grace must pass the CAPUT before it can be introduced into the Senate.

Divinity.—J. Lamb, D.D. Corp. Christi Col.	
Law.—W. Frere, D.C.L. Downing Col.	
Physic.—F. Thackeray, M.D. Emman. Col.	
Sen. Non. Regent.—T. Musgrave, M.A.	
Trin. Col.	
Sen. Regent.—H. Holditch, M.A. Caius Col.	

PROFESSORS.

Margaret Divinity.—Bishop of Peter-	
borough, F.R.S. ....	1807
Regius Divinity.—Thos. Turton, B.D.	1827
Regius Civil Law.—Jas. W. Geldart,	
D.C.L. ....	1813
Physic.—J. Haviland, M.D. ....	1817
Casuistical Professor. — F. Barnes,	
D.D. ....	1813
Hebrew.—H. Lloyd, D.D. ....	1795
Greek.—James Scholefield, M.A. ....	1825
Mathematical.—C. Babbage, M.A.,	
F.R.S. ....	1820
Arabic.—S. Lee, M.A. ....	1819
Ld. Alm. Arab.—T. Musgrave, M.A.	1820
Plumian Astronomy.—G. B. Airy, M.A.	1828
Lowndes's Ditto.—W. Lax, M.A. F.R.S.	1795
Anatomy.—W. Clarke, D.M. ....	1817
Modern History.—W. Smyth, M. A.	1807
Chemistry.—J. Cumming, M.A. F.R.S.	1815
Botany.—J. S. Henslow, M.A. ....	1825
Woodwardian Lecturer.—A. Sedg-	
wick, M.A. F.R.S. ....	1818
Lady Margaret's Preacher.—A. J.	
Carrighan, B.D. ....	1824
Norrisian Professor.—J. B. Holling-	
worth, D.D. ....	1824
Jacksonian Profess.—W. Farish, B.D.	1813
Common Law.—T. Starkie, M.A. ....	1823
Medicine.—Cornwallis Hewet, M.D.	1814
Music.—J. Clarke Whitfield, Mus.D.	1821
Mineralogy.—W. Whewell, M.A.,	
F.R.S. ....	1823

UNIVERSITY OFFICERS.

Public Orator.—Ralph Tatham, B.D.	1809
Christian Advo.—T. S. Hughes, B.D.	1822

Christian Preacher.—

Principal Librarian.—

Librarian.—Rev. J. Lodge, M.A. ....	1822
Registrar.—W. Hustler, M.A. ....	1816
Esquire-Bedels.—H. Gunning, M.A. ....	1789
G. Leapingwell, M.A. ....	1826
W. Hopkins, B.A. ....	1827
Members of the Senate .....	1974
Members on the Boards.....	5104

UNIVERSITY OF LONDON.

COUNCIL.

The Right Hon. James Abercrombie, M.P.	
The Right Hon. Lord Auckland. Geo.	
Birkbeck, M.D. H. Brougham, esq. M.P.	
F.R.S. Thos. Denman, esq. The Right	
Honourable Earl of Dudley, F.R.S. I.	
L. Goldsmid, esq. M.R.S.L. Olinthus	
G. Gregory, LL.D. Geo. Grote, jun.	
esq. Joseph Hume, esq. M.P. F.R.S.	
The Most Noble the Marquis of Lans-	
downe, F.R.S. James Loch, esq. M.P.	
Steph. Lushington, D.C.L. M.P. Zach.	
Macaulay, esq. F.R.S. James Mill, esq.	
Jas. Morrison, esq. His Grace the Duke	
of Norfolk, F.R.S. Vis. Sandon, M.P.	
J. Smith, esq. M.P. W. Tooke, esq. F.R.S.	
M.R.S.L. V.P. Soc. Arts. Henry War-	
burton, esq. M.P. F.R.S. H. Waymouth,	
esq. John Whishaw, esq. F.R.S. Thos.	
Wilson, esq.	

Warden, Leonard Horner, esq., F.R.S.

ELECTED PROFESSORS.

Roman Language, Literature, and Antiqui-	
ties, Thos. Hewitt Key, esq., A.M.	
Greek Language, Literature, and Antiqui-	
ties, George Long, esq. A.M. Fellow of	
Trin. Col. Cambridge.	
English Language and Literature, the	
Rev. Thos. Dale, A.M. Corp. Col. Cam.	
French Language, P. F. Merlet, esq.	
German Language and Literature, Ludwig	
Von Mühlenfels, LL.D.	
Italian Language and Literature, Anthony	
Panizzi, esq.	
Spanish Language and Literature, Anthony	
Galiano, esq.	
Hebrew Language and Literature, Hyman	
Hurwitz, Esq.	
Hindoostanee Language, J. B. Gilchrist,	
LL.D.	
Mathematics, Augustus de Morgan, esq.	
A.B.	
Persian, Arabic, and Sanskrit Languages,	
Frederic Rosen, Phil. Doct.	
Natural Philosophy and Astronomy, The	
Rev. Dionysius Lardner, LL.D. F.R.S.	
of Trin. Col. Dublin.	
Comparative Anatomy and Zoology, Robt.	
E. Grant, M.D.	
Jurisprudence, John Austin, esq.	
English Law, Andrew Amos, esq. A.M.,	
of the Temple, Barrister at Law, late	
Fellow of Trin. Col., Cambridge.	

\* \* All the above classes commenced in November, and will continue throughout the Academical Session, which terminates in July. The Law Classes will be suspended during the Spring Circuit and Quarter Sessions.

*Political Economy*, John R. McCulloch, esq.  
*Botany*, John Lindley, esq. F.R.S.

#### MEDICAL CLASSES.

Commenced 1st of Oct. and terminate in May.

*Anatomy*, G. S. Pattison, esq.  
*Physiology and Surgery*, Charles Bell, esq. F.R.S.

*Dissections and Demonstrations*, J. R. Bennett, esq.

*Nature and Treatment of Diseases*, J. Conolly, M.D.

*Midwifery, and the Diseases of Women and Children*, David D. Davis, M.D.

*Chemistry*, Edward Turner, M.D.

*Materia Medica and Pharmacy*, Anthony Todd Thomson, M.D. F.L.S.

*Clinical Medicine*, Thos. Watson, M.D.

*Medical Jurisprudence*, J. G. Smith, M.D.

*Clerk*, Thomas Coates, Secretary to the Society for the Diffusion of Useful Knowledge.

#### INNS OF COURT.

##### TEMPLE, 1185.

*Master*, Rev. Christopher Benson, M.A.

*Reader*, Rev. W. H. Rowlat, M.A.

*Treasurer of the Inner Temple*, Robert Ray, esq.

*Sub-Treasurer*, Mr. James Gardner.

*Librarian*, Rev. Mr. Rowlat.

*Treasurer of Middle Temple*, Chas. Savill Onley, esq.

*Sub-Treasurer*, Mr. W. Eldred.

*Master of the Library*, J. Raymond, esq.

*Keeper of the Library*, Mr. J. Bray

##### LINCOLN'S INN, 1310.

*Treasurer*, W. Horne, esq.

*Librarian*, W. Owen, esq.

*Dean of the Chapel*, W. Horne, esq.

*Keeper of the Records*, W. Agar, esq.

*Master of the Walks*, W. Wingfield, esq.

*Chaplain*, Rev. C. Hotham, M.A.

*Preacher*, Rev. Edward Maltby, D.D.

*Assistant*, Rev. W. Forbes Raymond, A.M.

*Steward*, Mr. Thomas Lane.

*Clerk*, Mr. Joseph Sisserson.

##### GRAY'S INN, 1357.

*Treasurer*, George Wailes, esq.

*Dean of the Chapel*, M. F. Ainslie, esq.

*Preacher*, G. Shepherd, D.D.

*Reader*, Rev. Edw. Chaplain, M.A.

*Steward*, Mr. Thomas Griffith.

*Under Steward*, Mr. R. Dennison.

### IV. MISCELLANEOUS INFORMATION.

#### CIRCUITS OF THE JUDGES.

**HOMER.**—*Herts.* Hertford, Lent, Summer, and Winter.

*Essex*—Chelmsford, L. S. and W.

*Kent*—Maidstone, L. S. and W.

*Sussex*—{ Horsham, L.

{ Lewes, S. and W.

*Surrey*—{ Kingston, L.

{ Guildford, } alternate, S.

{ Croydon, }

**OXFORD.**—*Berks.*—{ Reading, L.

{ Abingdon, S.

*Oxon.*—Oxford, L. and S.

*Worcester & City*—Worcester, L. & S.

*Stafford*—Stafford, L. and S.

*Salop.*—Shrewsbury, L. and S.

*Hereford*—Hereford, L. and S.

*Monmouth*—Monmouth, L. and S.

*Gloucester & City*—Gloucester, L. & S.

**MIDLAND.**—*Northampton*—Northampton, L. and S.

*Rutland*—Oakham, L. and S.

*Lincoln and City*—Lincoln, L. & S.

*Nottingham and Town*—Nottingham, L. and S.

*Derby.*—Derby, L. and S.

*Leicester & Boro.*—Leicester, L. & S.

*Warwick and Coventry*

*Coventry*—{ Warwick, L. and S.

**NORFOLK.**—*Bucks.*—{ Aylesbury, L.

{ Buckingham, S.

*Bedford*—Bedford, L. and S.

*Huntingdon*—Huntingdon, L. and S.

*Cambridge*—Cambridge, L. and S.

*Ite of Ely*—Ely, L. and S.

*Norfolk*—{ Thetford, L.

{ Norwich, S.

*Suffolk*—Bury St. Edmund's, S.

**NORTHERN**—*York & City*—York, L. & S.

*Durham*—Durham, S.

*Newcastle and Town*—Newcastle, S.

*Cumberland*—Carlisle, S.

*Westmoreland*—Appleby, S.

*Lancaster*—Lancaster, L. and S.

**WESTERN.**—*Southampton*—Winchester, L. and S.

*Wills.*—New Sarum, L. and S.

*Dorset*—Dorchester, L. and S.

*Devon and Exeter*—Exeter, L. and S.

*Cornwall*—{ Launceston, L.

{ Bodmin, S.

*Somerset*—{ Taunton, L.

{ Bridgwater, } alternate,

{ Wells, } S.

*Bristol*—Bristol, S.

**CHESTER.**—*Chester*—Chester, L. and S.

*Flints.*—Mold, L. and S.

*Montgomery*—Welsh Pool, L. and S.

*Denbigh*—Ruthen, L. and S.

**CARMARTHEN OR SOUTH WALES.**

*Cardigan*—Cardigan, L. and S.

*Pembroke*—Pembroke, S.

*Carmarthen*—Carmarthen, L. and S.

*Haverford West*—Haverford West,

L. and S.

**BRECON**—*Glamorgan*—Cardiff, L. & S.

*Brecon*—Brecon, L. and S.

*Radnor*—Presteign, L. and S.

**NORTH WALES**—*Anglesea*—Beaumaris,

L. and S.

*Carnarvon*—Carnarvon or Conway,

*Merioneth*—Bala, or Dolgelli, L. & S.

#### ENGLISH DIOCESES.

*In the Province of Canterbury.*

Dioceces.

Extent of Diocese.

*Canterbury* . . . Part of Kent. [Herts.

*London* . . . Essex, Middlesex, part of

Winchester . . . Surrey, Hants, I. of Wight,  
Jersey, Guern., Alderney  
Lich. & Coven. . . Staffords. Derbys. part of  
Warwicksh. Shropshire  
Lincoln . . . . . Lincoln, Leices. Hunting.  
Beds. Bucks. pt. of Herts  
Ely . . . . . Part of Cambridgeshire  
Salisbury . . . . . Wiltshire, Berkshire  
Exeter . . . . . Cornwall, Devonshire  
Bath and Wells . . . . . Somersetshire  
Chichester . . . . . Sussex  
Norwich . . . . . Norfolk, Suffolk, part of  
Cambridgeshire  
Worcester . . . . . Worcester. pt. of Warwick  
Hereford . . . . . Herefordsh. pt. of Shrops.  
Rochester . . . . . Part of Kent  
Oxford . . . . . Oxfordshire  
Peterborough . . . . . Northampton. Rutlands.  
Gloucester . . . . . Part of Gloucestershire  
Bristol . . . . . City of Bristol, pt. of Gloucesters. and Dorsetshire  
Llandaff . . . . . Glamorgans. Monmouths.  
Brecknocksh. Radnorsh.  
St. David's . . . . . Pembroke. Cardigansh.  
Carmarthenshire  
St. Asaph . . . . . Flint. Denbigh, Montgomerys. pt. of Shropshire  
Bangor . . . . . Anglesey, Carnar. Merion. pt. of Denbigh. Montgom.  
*Province of York.*  
York . . . . . Most of Yorkshire and Nottinghamshire  
Durham . . . . . Durham & Northumberland.  
Carlisle . . . . . Part of Cumberland and Westmorland  
Chester . . . . . Chesh. Lancas. Richmond, pt. of Cumbr. Westmor.  
Sodor and Man . . . . . Isle of Man

# **LAW AND OTHER PUBLIC OFFICES,** *With Hours of Attendance.*

Accountant General's Office, Chancery-lane; 9 to 2, and 4 to 7; and for delivery of Drafts, 11 to 2  
Admiralty College Advocate, Bakers'-court, 9 to 7  
Admiralty Office, Charing-cross.  
Affidavit Office, Symonds' Inn, 9 to 2, and 4 to 8; in vacation 11 to 2  
\* \* Candles not lighted from the last Seal after Michaelmas Term, to the first Seal before Hilary Term  
Alienation Office, 7, King's Bench Walk, Temple; 11 to 1, and 3 to 5  
\* \* The Commissioners attend only from 11 to 12, in the long vacation, on Tuesdays and Wednesdays  
Allowance Office for spoiled Stamps, Somerset-place. Tuesdays and Thursdays, 12 to 2  
Appeals for Prizes, High Court, College Square, 9 till 7.  
Archdeacon of London's Office, Knight Ryder-street.  
Archdeacon of Middlesex Office, 3, Godliman-street.  
Archdeacon of Surrey's Office, Paul's Chain.  
Archdeaconry of Rochester, 19, Bennett's-hill  
Arches Court, College-sq. 9 till 8  
Arches' Register, Deans-court, 9 to 8  
Auditor's Office, Somerset-pl., 10 till 2

Augmentation Office, Palace-yard, Westminster, 10 to 1  
Bankrupts' Office, (Secretary of) Southampton-buildings, 10 to 3, and 6 to 8  
Bankrupt Office, (Patentee for Commissions) 10 to 3, and 6 to 8; 5, Lincoln's Inn New Square  
Bill of Middx. Office, (King's Bench) 15, Clifford's Inn; hours same as Seal Office  
Bishop of London's Office, Godliman-street, 9 to 8  
Bishop of London Register, Knight Rider-st.  
Bishop of Winchester's Office, 10, Knight Ryder-street.  
Board of Control for East India Affairs, Cannon-row, Westminster, 10 to 4  
Board of Works, Scotland-yard  
Booking Office of the Deanery, Gt. Knight Ryder-street.  
Borough Court of Southwark, St. Margaret's Hill, Monday, 3 to 4  
Chancery Office, Southampton-buildings, 10 to 2—also from 6 to 8 in Term Time.  
Chancery (Court of) Lincoln's Inn, and Westminster Hall  
Chirographer's Office, (C. P.) Middle Temple-lane, 11 to 3  
City Solicitor's Office, Guildhall, King-street, Cheapside  
Clerk of the Crown Office, Roll's-yard, Chancery-lane  
Clerk of the Docquets, (K. B.) King's Bench Office  
Clerk of the Docquets, (C. P.) Prothonotaries' Office  
Clerk of the Essoigns Office, (C. P.) Elm-court, Temple, 11 to 2, and 4 to 8 in Term, and 4 to 6 in Vacation  
Clerk of the Juries and Hab. Cor. Office, 10 to 3, and 5 to 8 in Term. Executed at Chief Justice C. P.'s Chambers  
Clerk of the Foreign Estreats Office, Exchequer Office, Somerset-place  
Clerk of the Errors Office, at Lord Chief Justice's Office  
Clerk of Outlawries, executed by Attorney General's Clerk  
Clerk of the Papers' Office (K. B.), 4, Symond's Inn, 10 to 2, and 6 to 8  
Clerk of the Papers Office, (C. P.) Fleet Prison, 10 to 3, and 6 to 9 in Term  
Clerk of the Papers Office, (K. B.) near the King's Bench Prison, 10 to 2, and 6 to 9  
Clerk of the Rules Office, (K. B.) 6, Symond's Inn, 10 to 2, and 6 to 9, in Vacation, 10 to 2  
Clerk of the Peace, for Surrey, North-street, Lambeth  
Commissary of London's Office, 16, Great Knight Ryder-street  
Commissary of Surrey's Office, 6, Knight Rider-street, 9 to 8  
Commissioners of Sewers, Guildhall-yard.  
Common Bail Office, (K. B.) King's Bench Office, Temple, 11 to 2, and 5 to 7 in Term, and 11 to 3 in Vacation  
Common Pleas or Prothonotaries' Office, Tanfield-court, 11 to 1, and 4 to 8 in Term, and 1 to 6 in Vacation  
Corporation Office, 13, Paper-buildings, 10 to 2, and 4 to 7.  
Council Office, Cockpit, Whitehall, 10 to 4

- Courts of Conscience** :—Guildhall; Castle street; Vine-street; Kingsgate-street, Holborn; Osborne-street, and St. Margaret's-hill
- Court of Common Pleas**, King's Bench and Exchequer, at Westminster Hall, and Guildhall, King-street, Cheapside
- Courts of Record**, within the manor of Stepney and Hackney, in the County of Middlesex, Whitechapel
- Crown Office**, (K. B.) 2, King's Bench-walk, Temple, 10 to 2, and 5 to 8
- Crown Office**, in Chancery, Rolls-yard
- Cursitor's Office**, Rolls-yard, 10 to 2, and 6 to 8 in Term time, and 11 to 2 in Vacation
- Custos Brevium Office**, (C. P.) 4, Elm-court, Temple, 11 to 2, and 5 to 7 in Term time, and 11 to 1 in Vacation
- Dean and Chapter of Westminster's Office**, Bennett's Hill.
- Declaration Office**, King's Bench Office, Inner Temple, hours same as Seal Office
- Delegates**, Court of, College square
- Delegate Office**, College-square; 9 to 7
- Dispensation Office** (C.), 4, Elm-court, Temple
- Duchy of Cornwall Office**, Somerset-place
- Duchy Office**, Lancaster, Somerset-place, and Lancaster-place, Waterloo-bridge, 10 to 4
- Enrolment Office**, Chancery-lane, 10 to 2, and 6 to 8
- Enrolment of Fines and Receiver's Office**, Inner Temple
- Error Office for Allowance and Transcript**, (K. B.) at Lord Chief Justice's Chambers
- Error Office**, (K. B.) Gray's-Inn Square
- Error Office**, (C. P.) 4, Serjeants'-Inn, 10 to 2, 5 to 7
- Examiners' Office**, Rolls-yard, Chancery-lane, 10 to 4 in Term, and 11 to 2 in Vacation
- Exchequer Chamber Office**, Garden-court; 10 to 12, and 5 to 7 in Term, and 10 to 12 Vacation
- Exchequer of Pleas Office**, 9, Lincoln's Inn, Old-square, 9 to 2, and 4 to 8
- Exchequer Loan Bill Office**, over the Royal Exchange
- Excise Office**, Broad-street, 9 to 2
- Excise Export Office**, Tower-hill
- Faculty Office**, Knight Rider-st. 9 to 3
- Fen Office**, Tanfield-court, Inner Temple, 10 to 2, Mondays, Wednesdays, and Fridays
- Filazer's Office** to the Common Pleas for London and Middlesex, 4, Elm-court, Inner Temple
- Filazer's, Exigenter's, and Clerk of the Outlawries' Office**, 1, Pump-ct. Middle Temple (K.B.)
- First Fruits' Office**, 2, opposite the Church, Inner Temple, 10 to 2
- Foreign Apposer's Office**, Exchequer Office, Inner Temple, 10 to 4
- Gazette Office**, Cannon-row
- Gazette Advert. Office**, 42, Chancery-lane
- Grand Junction Canal Office**, Surrey-street, Strand
- Hackney Coach and Chair Office**, Essex-street; 9 to 3
- Hanaper Office**, Temple, 10 to 4
- Hawkers' and Pedlars' Office**, Somerset-place; 10 to 2
- Heralds' College Office**, St. Bennett's-hill.
- Doctors' Commons**, 10 to 4
- Inrolment Office**, Chancery-lane; 10 to 2, and 6 to 8
- Inrolment of Fines and Receiver's Office**, Inner Temple
- Insolvent Debtors' Court**, Portugal-street
- Invalid Office**, opposite the Admiralty.
- Judges' Chambers**, Serjeants' Inn, Chancery-lane, 10 to 4 and 6 to 9 in Term, and 11 to 3 in Vacation
- Judgment Office**, and Clerk of the Docquets (King's Bench Office), Inner Temple.
- Hours the same as the Seal Office.
- King's Bench Office**, King's Bench walk, Temple, 11 to 2 and 5 to 7; in Term 11 to 3. In Vacat. same as the Seal Office
- King's Remembrancer's Office**, Eq. Ex. King's Bench, Temple, 10 to 4 and 6 to 9. No attendance from Christmas till after Twelfth Day
- King's Silver Office** (C. P.), Elm-ct. 11 to 3
- Land Tax Office for London**, Guildhall-yd.
- Land Tax Register Office**, Somerset-place.
- Legacy Duty Office**, Somerset-place
- Lord Chamberlain's Office**, Stable-yard, St. James's
- Lord Treasurer's Remembrancer's Office**, Somerset-place.
- Lord Mayor's Court and Office**, Royal Exchange, 10 to 2.
- Marshalsea and Palace Court**, Scotland-yard.
- Masters' in Chancery Office**, Southampton-buildings, 10 to 3 and 6 to 8; except in Trinity Term, when only a few attend in the afternoon
- Master's Office**, Paper-buildings, Temple (K. B.), 11 to 1; and 6 to 8 in the evenings in Term
- Master of the Rolls' Office**, Rolls-yard, Chancery-lane
- Navy Office**, Somerset-place,
- Nisi Prius Office**, King's Bench Office, 11 to 1, and 4 to 7 in Term
- Office of Coroners for Middlesex**, 44, Bedford-row
- Office for taking Affidavits in Chancery**, K.B. and C.P. Ireland, for London District, 9, Southampton-buildings, 11 to 4.
- Ordnance Office**, Pall Mall
- Patent Office**, 4, Lincoln's Inn, Old-square, 10 to 4
- Palace Court Office**, 39, Chancery-lane
- Pay Office of the Army**, Hse. Gds., Whiteh.
- Navy**, Somerset-place, 10 to 2.
- Peculiar of Archb. of Canterbury's Office**, Bell-yard, Doctor's Commons.
- Pell Office**, Westminster Hall, 10 to 1
- Petty Bag Office**, Rolls-yard (C.), 10 to 2 and 5 to 8
- Pipe Office**, Somerset place
- Plantation Office**, Whitehall, 11 to 3.
- Prerogative Court**, College-sq. Doctors' Commons.
- Prerogative Office**, Knight Rider-street, 9 to 4, and 9 to 3 in winter.
- Presentation Office**, 2, Hare-court, Middle Temple



Privy Seal and Signet Office, Somerset-place  
 Prothonotaries' Office, Tanfield-ct. Temple  
 Public Accounts Office, Somerset-place.  
 Public Office in Chancery, Southampton-buildings.  
 Public Offices for the Administration of Justice—Bow-st.: Queen-square, Westminster; Great Marlborough-st.; Hatton Garden; Worship-street; Lambeth-st., Whitechapel; High-street, Mary-le-bone; and Union-street, Southwark  
 Queen Anne's Bounty Office, Dean's-yard, Westminster.  
 Receiver's Office for Greenwich Hospital, Tower Hill.  
 Record Office, Tower, (Chancery) 10 to 3  
 Record Office (Old), Westminster Abbey  
 Register Office of Bankruptcies, from 1771, to present time, 34, Red Lion-square.  
 Register Office, Chancery-lane (C.), 10 to 2 and 5 to 8  
 Register Office of Deeds in Middlesex, Bell-yard, Temple-bar, open from 10 to 3, and Register 11 to 1.  
 Register Office of the Dean and Chapter of St. Paul's, Carter-lane, 9 to 8  
 Report Office, Chancery New Buildings, Chancery-lane, 10 to 1 and 4 to 8  
 Salt Office, Somerset-place.  
 Seal Office, 3, Inner Temple-lane, during Term, and ten days after Hilary and Trinity Terms; and one week after each of the other Terms, from 11 to 2 in the forenoon, and from 5 to 7 in the afternoon. At other periods from 11 to 3  
 Secondaries' Office of Pleas (K. B.), King's Bench Walk, 11 to 2 and 5 to 7 in Term, and 10 to 12 and 11 to 3 in Vacation.  
 Secretary's Office, Rolls, Chancery-lane, 10 to 2 and 6 to 8  
 Sheriffs' of London Office, 28, Coleman-street, 12 to 2 and 3 to 6  
 Sheriffs' of Middlesex Office, Red Lion-square, 11 to 2 and 5 to 7 in Term, and 11 to 3 in Vacation  
 Signer of Writs' Office (K. B.), King's Bench Office, Temple. Hours same as Seal Office  
 Signet Office, Somerset-place.  
 Six Clerks' Office, Chancery-lane, 10 to 2 and 6 to 8 in Term, and 10 to 2 in Vac.  
 Society for Diffusion of Useful Knowledge, 4, Holborn-court, Gray's Inn  
 Stage Coach Duty Office, Somerset-place.  
 Stamp Office, Somerset-place, 9 to 4  
 Stamp Office, Irish, 47, Chancery-lane  
 State Paper Office, Middle Scotland-yard, 10 to 3  
 Subpoena Office, Rolls-yard, 11 to 2 and 5 to 8 in Term, and 11 to 2 in Vac. only  
 Surgeons' College, Lincoln's-inn-fields.  
 Surveyor of Crown Lands, Somerset-place.  
 Tax Office Somerset-place, 10 to 2.  
 Tenth's Office, Lincoln's Inn Chambers, Portugal-street, every day, Holidays excepted, 10 to 2  
 Treasurer for the County of Middlesex Office, Staples' Inn  
 Treasury Office, Whitehall.  
 Treasury Remembrancer's Office, Somerset-place, 10 to 4

Two-Penny Post Offices, Lombard-st. and Gerard-street.  
 Vicars General and Peculiars Office, Bell-yard, Doctors' Commons, 9 to 8.  
 Warrant of Attorney Office, 3, Pump-court, Middle Temple (C. P.), 11 to 2 and 4 to 7 in Term, and 4 to 6 only in Vacation

# GENERAL POST-OFFICE, LONDON.

Letters to go the same day must be put in before seven o'clock; but those put in before half past seven, will go that evening, paying sixpence with each.

Letters pay, if single, from any post-office in England to any place not exceeding 15 measured miles from such office 4d.

Above 15 not exceeding 20m. ....	5
20 ..... 30 .....	6
30 ..... 50 .....	7
50 ..... 80 .....	8
80 ..... 120 .....	9
100 ..... 170 .....	10
120 ..... 230 .....	11
200 ..... 300 .....	12
300 ..... 400 .....	13
400, for every 100, or part thereof 1	

Letters between England and Ireland pay, over and above the common rates, a packet postage, viz., for every single letter, 3d.—Double, 4d.—Treble, 5d.—Ounce weight, 9d.

Packets of one ounce weight are charged as four single letters.—If a single sheet exceed one ounce, it is charged according to its weight.

Packets or covers, containing patterns or samples only, not exceeding one ounce, are charged double postage.

Newspapers, to go the same day, must be put into the General Post Office before six o'clock; but those put in before half-past seven o'clock, will go the same evening by paying a halfpenny with each.

The weight of a letter franked by a Member of Parliament must not exceed one ounce. Each Member may frank ten and receive fifteen daily.

## FOREIGN LETTERS.

America and West Indies, 2s. 2d.—Madeira, 2s. 7d.—Gibraltar, 2s. 10d.—Malta, Majorca, Sicily, and the Mediterranean, 3s. 2d.—South America, 3s. 6d.—Portugal, 2s. 6d.—France, 1s. 2d.—Holland, 1s. 4d.—Hamburg, Denmark, Norway, Sweden, Germany, Prussia, Russia, &c. 1s. 8d.—Italy by Germany, 1s. 8d.; by France, 1s. 11d.—Spain, by France, 2s. 2d.

Mails made up in London as follows: France, Monday, Tuesday, Thursday, and Friday: Letters received on Tuesday and Friday till 11 P.M., and on Monday and Thursday till 7 P.M. Holland and Netherlands, Germany, and the North of Europe, every Tuesday and Friday: Letters received till 11 P.M. Sweden, every Friday: Letters rec. til 11 P.M. Jamaica and America, first Wednesday, Monthly.

Leeward Islands and Demerara, first and third Wednesday, Monthly. Madeira and Brazils, first Tuesday, Monthly. Portugal, every Tuesday. Gibraltar, Malta, and Mediterranean, first Tuesday, Monthly. Buenos Ayres, third Tuesday, Monthly. Columbia, first Wednesday, Monthly. La Guayra, Mexico, Havannah, and St. Domingo, third Wednesday, Monthly.

### TWOPENNY POST-OFFICE.

There are two principal offices; one adjoining to the General Post-Office, the other in Gerrard-street, Soho.

*Letters going from one Part of the Town to another.*—If put into the Receiving Houses by 8, 10, and 12 o'clock in the morning, and by 2, 5, and 8, in the afternoon: or either of the two principal Offices by 9 and 11 in the morning, and by 1, 3, 6, 9, in the afternoon: they are sent out for Delivery at 10 and 12 in the morning; and at 2, 4, 7, in the afternoon, and 8 the next morning. Each letter must not weigh more than four ounces.

### MAIL COACHES.

*Bath, Exeter, Plymouth, and Devonport* through Hounslow; Maidenhead, Reading, Newbury, Hungerford, Marlborough, Devizes, Bath, Wells, Glastonbury, Bridgewater, Taunton, Wellington, Collumpton, Exeter; from thence to Plymouth, through Liskeard, to Falmouth and Penzance, from the Swan, Lad-lane, half-past 7 o'clock.

*Birmingham*, through Aylesbury, Bicester, Banbury, Southam, Warwick, and Leamington, from King's Arms, Snow-hill, half-past 7 o'clock.

*Brighton*, through Croydon, Reigate, Crawley, and Cuckfield, from Blossom's Inn, Lawrence-lane.

*Bristol*, through Reading, Newbury, Marlborough, Calne, Chippenham, Bath, Bristol; from thence to Newport, Cardiff, Cowbridge, Swansea, Carmarthen, and Milford Haven, from Swan, Lad-lane, half-past seven o'clock.

*Carlisle, Glasgow, and Leeds*, through Barnet, Bedford, Higham Ferrers, Kettering, Nottingham, Sheffield, Harrogate, Greta-bridge, and Appleby, to Carlisle and Glasgow, from Bull and Mouth, Bull and Mouth-street, at half-past 7.

*Carmarthen*, by *Gloucester*, through Hounslow, Henley, Nettlebed, Oxford, Witney, Burford, Cheltenham, Gloucester, Ross, Monmouth, Abergavenny, Brecknock, Llandovery, Carmarthen; from thence to Haverfordwest & Milford, from the Angel, behind St. Clement's, Strand, at half-past 7.

*Chester*, through Northampton, Hinckley, Atherstone, Lichfield, Stafford, Woore, Nantwich, and Tarpoley, from Golden Cross, Charing-cross, 7 o'clock.

*Dover*, through Dartford, Rochester, Sittingbourne, Feversham, Canterbury, and Dover, from the Angel, behind St. Clement's, at 7 o'clock.

*Dover*. Foreign Mail Coach, from the Angel, St. Clement's, Strand.

*Edinburgh, Aberdeen, Inverness, and Thurso*, through Ware, Buntingford, Royston, Caxton, Huntingdon, Stilton, Stamford, Grantham, Newark, Bawtry, Doncaster, Ferrybridge, York, Northallerton, Darlington, Durham, Newcastle, Alnwick, Berwick, Dunbar, Haddington, Edinburgh, Aberdeen, Banff, Inverness, Dingwall, Tain, Golspie, Wick, and Thurso, from Bull and Mouth, Bull and Mouth-street, at half-past 7 o'clock.

*Falmouth*, by *Exeter*, through Basingstoke, Andover, Salisbury, Blandford, Dorchester, Bridport, Axminster, Honiton, Exeter; from thence through Launceston to Falmouth and Penzance, from Swan, Lad-lane, at half-past 7 o'clock.

*Glasgow and Carlisle*, by *Manchester*, through St. Alban's, Dunstable, Northampton, Harborough, Leicester, Loughborough, Derby, Manchester, Preston, Lancaster, Kendal, Penrith, and Carlisle; from thence to Glasgow, from Swan, Lad-lane, at half-past 7 o'clock.

*Harwich*, Foreign Mail Coach, from Spread Eagle, Gracechurch-street.

*Hastings*, through Farnborough, Tunbridge, Wells, and Lamberhurst, from Golden Cross, Charing-cross, and Bolt-in-Tun, Fleet-street.

*Holyhead*, through Dunstable, Coventry, Birmingham, Shrewsbury, Oswestry, and Bangor, from Swan-with-two-Necks, Lad-lane, at half-past 7 o'clock.

*Liverpool*, through Barnet, St. Alban's, Dunstable, Fenny Stratford, Stony Stratford, Towcester, Daventry, Coventry, Lichfield, Newcastle-under-Line, Knutsford, Warrington, and Liverpool; and from thence to Lancaster and Carlisle, from Swan, Lad-lane, at half-past 7.

*Louth*, by *Boston*, through Cambridge, Stilton, Peterborough, Deeping, Spalding, and Spilsby, from Bell and Crown, Holborn, at half-past 7 o'clock.

*Ludlow*, by *Worcester*, through Uxbridge, Beaconsfield, High Wycombe, Oxford, Broadway, Woodstock, Eustone, Chipping Norton, Morton in the Marsh, Evesham, Pershore, Worcester; from thence to Leominster by Bromyard, Hereford by Ledbury, and Ludlow by Tenbury, from Bull and Mouth, Bull and Mouth-street, at half-past 7 o'clock.

*Norwich*, by *Ipswich*, through Ilford, Rufford, Brentwood, Ingatestone, Chelmsford; Witham, Kelvedon, Colchester, Ipswich, and Norwich, from Swan, Lad-lane, at half-past 7 o'clock.

*Norwich*, by *Newmarket*, Bury, and Thetford, from Black Bull, Aldgate, at half-past 7 o'clock.

*Poole*, by *Southampton*, through Staines, Bagshot, Alton, Alresford, Winchester, Ringwood, and Wimborne, from Bell and Crown, Holborn, at half-past 7 o'clock.

*Portsmouth*, through Kingston, Esher, Cobham, Ripley, Guildford, Godalmin, Liphook, Petersfield, Portsmouth, and from thence to Chichester, from the Angel, behind St. Clement's, at half-past seven o'clock.

*Yarmouth and Ipswich*, through Lowestoff and Saxmundham, from the White Horse, Fetter-lane, at 6 o'clock.

*N.B. The Mail Coaches set out one hour earlier on Sundays than on the week days.*

### PACKETS FROM LIVERPOOL.

*Rio Janeiro*.—On, the 1st and 16th of each month. Rate of Passage, 40*l*.

*New York*.—On the 1st, 8th, 16th, and 24th of each month. Rate of Cabin Passage, 35 guineas. Steerage, do. 5 to 6 *gs*.

*Philadelphia*.—On 8th and 20th of each month. Rate of Cabin Passage, 35 guineas. Steerage, ditto, 5 to 6 guineas.

*Boston*.—On 20th of each month. Rate of Cabin Passage, 35 guineas. Steerage, ditto, 5 to 6 guineas.

*Leghorn and Genoa*.—On 1st and 16th of each month. Rate of Passage, 20 *gs*.

*Lisbon*.—On 1st and 16th of each month. Rate of Passage, 10 guineas.

*Oporto*.—A vessel every 3 weeks. Rate of Passage, 12 guineas.

The New York, Boston, and Philadelphia Packets provide the Passengers with everything.

The Rio Janeiro, Leghorn and Genoa, Lisbon and Oporto Packets, do not provide wine or spirits.

### STEAM PACKETS.

*Carlisle*.—Every Monday morning, calling off Whitehaven.

*Dublin*.—Daily.

*Londonderry*.—Once in the week.

*Dundalk*.—Twice in the week.

*Drogheda*.—Three times in 14 days.

*Newry*.—On Saturday.

*Waterford*.—On Sunday.

*Wexford*.—Weekly.

*Cork*.—On 5th, 15th, and 25th of each month.

*Belfast*.—Three times a week.

*Glasgow*.—Daily.

*Whitehaven*.—Wednesday and Sunday.

*Lancaster*.—Weekly.

*Bangor and Beaumaris*.—Every day (Sunday excepted) during the summer months.

### RATES OF PARCELS FROM INNS.

For any parcel not weighing more than 56*lbs*., and when the distance does not exceed a quarter of a mile, 3*d*.; half a mile, 4*d*.; a mile, 6*d*.; a mile and a half, 8*d*.; two miles, 10*d*.; and 3*d*. for every additional half mile. Porters exacting more to be fined 20*s*., or not less than 5*s*.; misbehaving, 10*s*. to 20*s*.

A ticket to be sent with every parcel, with the charge for carriage and portorage marked on it, under a penalty of 40*s*., or not less than 5*s*. Parcels are to be delivered within six hours after arrival, under a penalty of 20*s*., or not less than 10*s*. Parcels arriving between four in the evening and seven in the morning, to be delivered in six hours from the latter period, under the like penalty.

## V. USEFUL TABLES.

A TABLE of the VALUE of an ANNUITY of £100. on a SINGLE LIFE, from Birth to 90 Years Old, as fixed by the Legacy Act.

Age.	Value.	Age.	Value.	Age.	Value.	Age.	Value.
	£. s.		£. s.		£. s.		£. s.
Birth	1032 14	23	1568 0	46	1203 18	69	664 14
1	1346 10	24	1556 0	47	1189 0	70	636 2
2	1563 6	25	1543 16	48	1168 10	71	607 10
3	1646 4	26	1531 4	49	1147 10	72	579 0
4	1701 0	27	1518 8	50	1126 8	73	550 14
5	1724 16	28	1505 6	51	1105 14	74	523 0
6	1748 4	29	1491 16	52	1084 18	75	496 4
7	1761 2	30	1478 2	53	1063 14	76	471 0
8	1766 4	31	1463 18	54	1042 2	77	445 14
9	1762 10	32	1449 10	55	1020 2	78	419 14
10	1752 6	33	1434 14	56	997 14	79	392 2
11	1739 6	34	1419 10	57	974 18	80	364 6
12	1725 2	35	1403 18	58	951 12	81	337 14
13	1710 6	36	1388 0	59	928 0	82	312 4
14	1695 0	37	1371 12	60	903 18	83	288 14
15	1679 2	38	1354 16	61	879 10	84	270 16
16	1662 10	39	1337 10	62	854 14	85	254 6
17	1646 4	40	1319 14	63	829 2	86	239 6
18	1630 18	41	1301 16	64	803 0	87	225 2
19	1616 14	42	1283 16	65	776 2	88	213 2
20	1603 6	43	1265 14	66	748 16	89	196 14
21	1591 4	44	1247 4	67	721 2	90	173 16
22	1579 14	45	1228 6	68	693 0		

## STAMP TABLE.

## BILLS, PROMISSORY NOTES, &amp;c.

Not exceeding 2 months after date, or 60 days after sight.    Exceeding 2 months after date, or 60 days after sight.

		<i>l.</i>	<i>s.</i>	<i>d.</i>	<i>l.</i>	<i>s.</i>	<i>d.</i>
If 40s. above	5 <i>l.</i> 5 <i>s.</i>	0	1	0	0	1	6
20	20 <i>l.</i>	0	1	6	0	2	0
30	30	0	2	0	0	2	6
50	50	0	2	6	0	3	6
100	100	0	3	6	0	4	6
200	200	0	4	6	0	5	0
300	300	0	5	0	0	6	0
500	500	0	6	0	0	8	6
1000	1000	0	8	6	0	12	0
2000	2000	0	12	6	0	15	0
3000	3000	0	15	0	1	5	0
	—	1	5	0	1	10	0

Penalty for post-dating bills 100*l.*

Bills of Lading.....	£0	3	0
Agreements.....	1	0	0

## FOREIGN BILLS OF EXCHANGE, IN SETS.

For every Bill of each set, not exceeding.....	£100	<i>s.</i>	<i>d.</i>
Above £100 and not exceeding 200	200	3	0
500	500	4	0
1000	1000	5	0
2000	2000	7	6
3000	3000	10	6
		15	0

## RECEIPTS.

	<i>s.</i>	<i>d.</i>
If £2 and under £5.....	0	2
5 .... 10.....	0	3
10 .... 20.....	0	6
20 .... 50.....	1	0
50 .... 100.....	1	6
100 .... 200.....	2	6
200 .... 300.....	4	0
300 .... 500.....	5	0
500 .... 1000.....	7	6
1000 and upwards.....	10	0
For any sum expressed in full of all demands.....	10	0

## APPRAISEMENTS.

	<i>s.</i>	<i>d.</i>
Not exceeding £50.....	2	6
Above 50 not exceeding 100.....	5	0
100 .... 200.....	10	0
200 .... 500.....	15	0
500 .... —.....	20	0

## BONDS GIVEN AS A SECURITY FOR MONEY.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
Not exceeding £50.....	1	0	0
Above 50 and not exceeding 100	1	10	0
100 .... 200.....	2	0	0
200 .... 300.....	3	0	0
300 .... 500.....	4	0	0
500 .... 1000.....	5	0	0
1000 .... 2000.....	6	0	0
2000 .... 3000.....	7	0	0
3000 .... 4000.....	8	0	0
4000 .... 5000.....	9	0	0

5000 .....	10,000	12	0	0
10,000 .....	15,000	15	0	0
15,000 .....	20,000	20	0	0
20,000 .....	—	25	0	0

Mortgages same duty as Bonds.

## APPRENTICES' INDENTURES.

When the Premium is	<i>l.</i>	<i>s.</i>	<i>d.</i>
Under £30 .....	1	0	0
If 30 and under £50	2	0	0
50 .....	100	3	0
100 .....	200	6	0
200 .....	300	12	0
300 .....	400	20	0
400 .....	500	25	0
500 .....	600	30	0
600 .....	800	40	0
800 .....	1000	50	0
1000 and upwards.....	60	0	0
If no Premium 1 <i>l.</i> , or 1 <i>l.</i> 15 <i>s.</i> if more than 1030 words.			

## PROBATES OF WILLS, AND LET-TERS OF ADMINISTRATION.

WITH A WILL.				WITHOUT A WILL.	
Above the value of	and under	£	s.	£	s.
20	50			0	10
50	100			1	
100	200	0	10		
200	300	2		3	
300	450	5		8	
450	600	8		11	
600	800	11		15	
800	1,000	15		22	
1,000	1,500	22		30	
1,500	2,000	30		45	
2,000	3,000	40		60	
3,000	4,000	50		75	
4,000	5,000	60		90	
5,000	6,000	80		120	
6,000	7,000	100		150	
7,000	8,000	120		180	
8,000	9,000	140		210	
9,000	10,000	160		240	
10,000	12,000	180		270	
12,000	14,000	200		300	
14,000	16,000	220		330	
16,000	18,000	250		375	
18,000	20,000	280		420	
20,000	25,000	310		465	
25,000	30,000	350		525	
30,000	35,000	400		600	
35,000	40,000	450		675	
40,000	45,000	525		785	
45,000	50,000	600		900	
50,000	60,000	675		1,010	
60,000	70,000	750		1,125	
70,000	80,000	900		1,350	
80,000	90,000	1,050		1,575	
90,000	100,000	1,200		1,800	
100,000	120,000	1,350		2,025	
		1,500		2,250	

The scale continues to increase up to £10,000,000.

## DUTIES ON LEGACIES,

*Of the Value of 20l. or upwards, out of Personal Estate, or charged upon Real Estate, &c.; and upon every share of Residue:—*

To a child or parent, or any lineal descendant or ancestor of the deceased, 1l. per cent.—To a brother or sister, or their descendants, 3l. per cent.—To an uncle or aunt, or their descendants, 5l. per cent.—To a great uncle or great aunt, or their descendants, 6l. per cent.—To any other relation, or any stranger in blood, 10l. per cent.—Legacy to husband, or wife, exempt.

*If the Deceased died prior to the 5th April, 1805, the duty only attaches on Personal Estates, and by a lower scale.*

## AGREEMENT.

Of the value of 200l. and upwards, containing only 1080 words, 1l.; more than 1080 words, 1l. 5s.; and for every further 1080 words, 1l. 5s.

## ASSESSED TAXES.

## DUTIES ON HOUSES AND WINDOWS.

No. of Win.	Duty per House per year.	No. of Windows.	Duty per House per year.
£ s. d.			£ s. d.
8	0 16 6	..	35 11 18 3
9	1 1 0	..	36 12 6 9
10	1 8 0	..	37 12 15 3
11	1 16 3	..	38 13 3 6
12	2 4 9	..	39 13 12 0
13	2 13 3	40 to	44 14 8 9
14	3 1 9	45 ..	49 15 16 9
15	3 10 0	50 ..	54 17 5 0
16	3 18 6	55 ..	59 18 13 0
17	4 7 0	60 ..	64 19 17 9
18	4 15 3	65 ..	69 21 0 3
19	5 3 9	70 ..	74 22 2 6
20	5 12 3	75 ..	79 23 5 0
21	6 0 6	80 ..	84 24 7 6
22	6 9 0	85 ..	89 25 10 0
23	6 17 6	90 ..	94 26 12 3
24	7 5 9	95 ..	99 27 14 9
25	7 14 3	100 ..	109 29 8 6
26	8 2 9	110 ..	119 31 13 3
27	8 11 0	120 ..	129 33 18 3
28	8 19 6	130 ..	139 36 3 0
29	9 8 0	140 ..	149 38 8 0
30	9 16 3	150 ..	159 40 12 9
31	10 4 9	160 ..	169 42 17 9
32	10 13 3	170 ..	179 45 2 6
33	11 1 6	180 & upwds.	46 11 3
34	11 10 0		

## DUTIES ON INHABITED HOUSES.

£	s.	d.	
10 to 19, rent inclusive	1	6	per pound
20 to 39, Ditto	2	3	Ditto
40 and upwards, . . .	2	10	Ditto
And so on at the rate of 2s. 10d. in the Pound for Rent of any amount.			

## DUTIES ON MALE SERVANTS.

No.	At per Servant.	Total per Year.
1	£1 4 0*	£1 4 0
2	1 11 0	3 2 0
3	1 10 0	5 14 0
4	2 3 6	8 14 0
5	2 9 0	12 5 0
6	2 11 6	15 9 0
7	2 12 6	18 7 6
8	2 16 0	22 3 0
9	3 1 0	27 9 0
10	3 6 6	33 5 0
11	3 16 6	42 1 6
12	.. ..	45 18 0
13	.. ..	49 14 6
14	.. ..	53 11 0
15	.. ..	57 7 6
Duties on Bachelors' Male Servants.		
1	2 4 0	2 4 0
2	2 11 0	5 2 0
3	2 18 0	8 14 0
4	3 3 6	12 14 0
5	3 9 0	17 5 0
6	3 11 6	21 9 0
7	3 12 6	25 7 6
8	3 16 0	30 8 0
9	4 1 0	36 9 0
10	4 6 6	43 5 0
11	4 16 6	53 1 6
12	.. ..	57 18 0
13	.. ..	62 14 6
14	.. ..	67 11 0
15	.. ..	72 7 6

And so on at the same rate for any No. of Servants.

\* This Rate of Duty (1l. 4s.) is payable for every male person employed in any of the capacities, Sch. C, No. 1., and not being a servant to his employer, if the employer shall otherwise be chargeable to the above duties on servants, or for any carriage, or for more than one horse kept for riding, or drawing any carriage; and if the employer shall not be chargeable to such other duties then the sum of 10s. is payable for every such male person employed.

Travellers or Riders employed by any Merchant or Trader, where one only is kept, 1l. 10s., and where more than one is kept, 2l. 10s. each.

Clerks, Book-keepers, or Office-keepers, where only one is kept, 1l., and where more than one is kept, 1l. 10s., each.

Shopmen, Warehousemen, Cellarmen, or Porters, 1l. each. This rate of duty applies to Stewards, Bailiffs, Overseers, or Managers, or Clerks under them; and also to servants retained by Stable-keepers, for or in expectation of profit, to take care of any horse kept for the purpose of racing or running for any Plate, &c., or in training for the same.

Waiters in Taverns, &c., 1l. 10s. each.

Coachmen, &c., let on job, 1l. 5s. each.

This duty is extended to coachmen kept for the purpose of driving any public stage coach or carriage, and to persons employed as guards to such stage coach or carriage.

**DUTIES ON CARRIAGES WITH FOUR WHEELS OR MORE.**

No.	Per Carriage, 4 Wheels, for private use.	No.	4 Wheeled Stage Coaches and Post Chaises.
1	£6 0 0	1	£5 5 0
2	6 10 0	2	10 10 0
3	7 0 0	3	15 15 0
4	7 10 0	4	20 0 0
5	7 17 6	5	26 5 0
6	8 4 0	6	31 10 0
7	8 10 0	7	36 15 0
8	8 16 0	8	42 0 0
9	9 1 6	9	47 5 0

And so on at the same rate for any number of such carriages..

For every additional body used on the same carriage, 3*l*. 3*s*.

Coach-makers keeping carriages for the purpose of being let to hire without horses to be charged 6*l*. for each such carriage.

**DUTIES ON CARRIAGES WITH TWO WHEELS.**

Carriages with two wheels, each 3*l*. 5*s*. 0*d*.  
Do. drawn by two or more Horses  
or Mules . . . . . 4 10 0

For every additional Body used  
on the same Carriage . . . 1 11 6

**DUTIES ON HORSES.**

*Horses for Riding or Drawing Carriages.*

No.	At per Horse.	Total Yearly.
1	£1 8 9	£1 8 9
2	2 7 3	4 14 6
3	2 12 3	7 16 9
4	2 15 0	11 0 0
5	2 15 9	13 8 9
6	2 18 0	17 8 0
7	2 19 9	20 18 3
8	2 19 9	23 18 0
9	3 0 9	27 6 9
10	3 3 6	31 15 0
11	3 3 6	34 18 6
12	3 3 6	38 2 0
13	3 3 9	41 8 9
14	3 3 9	44 12 6
15	3 3 9	47 16 3
16	3 3 9	51 0 0
17	3 4 0	54 8 0
18	3 4 6	58 1 0
19	3 5 0	61 15 0
20	3 6 0	66 0 0

And so on at the respective rates for any number of Horses

Horses let to hire without Post  
Duty, and Race Horses, each . 1 8 9

Horses rode by Butchers in their  
trade, each . . . . . 1 8 9

Where two only are kept, the  
second at . . . . . 0 10 6

Horses not exceeding the height of  
13 hands, each . . . . . 1 1 0

One horse used by a Bailiff on a  
Farm . . . . . 1 5 0

Other horses 13 hands high, and  
Mules, each . . . . . 0 10 6

**DUTIES ON DOGS. £. s. d.**

For every Greyhound . . . . . 1 0 0

For every Hound, Pointer, Setting  
Dog, Spaniel, Terrier, or Lurcher;  
and for every Dog, where two or  
more are kept, of whatever de-  
nomination they may be (except  
Greyhounds) . . . . . 0 14 0

For every other Dog, where one  
only is kept . . . . . 0 8 0

Persons compounding for their  
hounds are to be charged . . 36 0 0

**HORSE-DEALERS DUTY.**

Every person exercising the Busi-  
ness of a Horse-dealer . . . 12 10 0

**HAIR POWDER DUTY.**

Persons wearing or using hair  
powder . . . . . 1 3 6

**ARMORIAL BEARINGS DUTY.**

Persons using Armorial Bearings,  
and keeping a coach, or other  
taxable carriage . . . . . 2 8 0

Persons not keeping such carriage  
but charged to the House or win-  
dow duty . . . . . 1 4 0

Persons not keeping such carriage,  
nor being chargeable to the House  
or Window Duty . . . . . 0 12 0

**GAME DUTY.**

Upon every Person who shall use any  
Dog, Gun, Net, or other Engine for the  
purpose of taking or killing any game whatever,  
or any Woodcock, Snipe, Quail, or Landrail,  
or any Conies; or shall take or kill, or as-  
sist in so doing, by any means whatever, any  
Game, or any Woodcock, Snipe, Quail, Land-  
rail, or Cony, by virtue of any deputation  
or appointment duly registered or entered,  
as Gamekeeper, for any lands in Scotland—

If such person shall be a Servant to any  
person duly charged in respect of such Ser-  
vant, to the duties granted on Servants by  
this Act, there shall be charged for such per-  
son acting by such deputation or appoint-  
ment, the annual sum of . . . 1*l*. 5*s*. 0*d*.

And if such person shall not be a Servant,  
for whom the said duties on Servants shall  
be charged, the annual sum of 3*l*. 13*s*. 6*d*.

Upon every other person using any Dog,  
&c. or taking or killing any Game, &c. as  
above, there shall be charged 3*l*. 13*s*. 6*d*.

**HACKNEY COACH AND CHARIOT  
FARES.**

*Fares according to distance.*

Not exceeding s. d.	Not exceeding s. d.
one mile . . . . . 1 0	six miles & half 8 0
one mile & half 1 6	seven miles . . . 8 6
two miles . . . . . 2 0	seven miles & half 9 0
two miles & half 3 0	eight miles . . . 9 6
three miles . . . . . 3 6	eight m. & half 10 6
three miles & hlf. 4 0	nine miles . . . 11 0
four miles . . . . . 4 6	nine miles & hlf. 11 6
four miles & half 5 6	ten miles . . . . 12 0
five miles . . . . . 6 0	ten miles & half 13 0
five miles & half 6 6	eleven miles . . 13 6
six miles . . . . . 7 0	twelve miles . . 15 0

And so on at the rate of 6*d*. for every half  
mile, and an additional 6*d*. for every two  
miles completed.

*Fares according to time.*

Not exceeding	s.	d.
thirty minutes .....	1	0
forty-five minutes .....	1	6
one hour .....	2	0
one hour and twenty minutes ..	3	0
one hour and forty minutes ...	4	0
two hours .....	5	6
two hours and twenty minutes.	6	0
two hours and forty minutes...	7	0
three hours .....	8	0
three hours and twenty minutes	9	0
three hours and forty minutes..	10	6
four hours .....	11	0

And so on, at the rate of 6d. for any fifteen minutes further time.

Cabriolets are entitled to two-thirds of the coach fares.

The fares are to be taken by the hour or mile only, and not by the day.

Coaches discharged after sun-set hours (viz. after 8 between Lady Day and Michaelmas, and after 5 between Michaelmas and Lady Day,) between the carriage-way pavement, or if hired at a stand beyond the same, may demand the full fare back to such extremity or standing. For coaches

hired to go into the country in the day time, and there discharged, additional fares are to be taken for their return to the pavement or next stand where hired as follow: for 10 miles, 5s.; 8 miles, 4s.; 6 miles, 3s., and 4 miles, 2s. If under 4 miles, nothing.

Coachmen are not compellable to take more than four adult persons inside, and a servant out; but if they agree to take more, then 1s. in addition to the fare must be paid for each extra person; and if the coach be hired for the country, and to return, 1s. for each extra person going, and 1s. for his returning.

Hackney Coach and License Act.—The following clause was added as a rider to the act:—"And be it further enacted, that it shall be lawful for any person to require any hackney coachman to drive for a stated sum of money a distance in the discretion of such hackney coachman; and in case such coachman shall exceed the distance to which such person was entitled to be driven for such stated sum of money, the coachman shall not be entitled to demand more than the sum for which he was so engaged to drive."

## WATERMEN'S RATES, for a SCULLER, from JULY 31, 1828.

West of	Southwark Bridge.	Blackfriars Bridge.	Waterloo Bridge.	Westminster Bridge.	Lambeth Stairs.	Vauxhall Bridge.	Red House.	Chelsea Bridge.
	d.	d.	d.	s. d.	s. d.	s. d.	s. d.	s. d.
London Bridge to .....	3	6	9	1 0	1 3	1 6	2 0	2 6
Southwark Bridge to ....	..	3	6	0 9	1 0	1 3	1 9	2 3
Blackfriars' Bridge to ...	..	..	3	0 6	0 9	1 0	1 6	2 0
Waterloo Bridge to .....	..	..	..	0 3	0 6	0 9	1 3	1 9
Westminster Bridge to ..	..	..	..	....	0 3	0 6	1 0	1 6
Lambeth Stairs to .....	..	..	..	....	....	0 3	0 9	1 3

East of	Iron Gate.	Union Stairs.	King Edward Stairs.	Shadwell Dk. Stairs.	Kidney Stairs.	Limehouse hole Sts.	Gray's Stairs Deptf.	Crawley's Wt. Greenh.
	d.	d.	d.	s. d.	s. d.	s. d.	s. d.	s. d.
London Bridge to .....	3	6	9	1 0	1 3	1 6	2 0	2 6
Iron Gate to .....	..	3	6	0 9	1 0	1 3	1 9	2 3
Union Stairs to .....	..	..	3	0 6	0 9	1 0	1 6	2 0
King Edward Stairs to ..	..	..	..	0 3	0 6	0 9	1 3	1 9
Shadwell Dock Stairs to .	..	..	..	....	0 3	0 6	1 0	1 6
Kidney Stairs to .....	..	..	..	....	....	0 3	0 9	1 3
Gray's Stairs, Deptford, to	..	..	..	....	....	....	....	0 6

Oars are double the fare of a Sculler.

From Chelsea-bridge, westward, to or towards Windsor, at the rate of Sixpence per half mile for Oars, and Threepence per half mile for Scullers.

From Crawley's wharf, Greenwich, eastward, to or towards Broadness-point, or Gray's, Sixpence for every half-mile.

Over the water directly, between Windsor and Crawley's wharf, Greenwich, (excepting the Sunday ferries,) for one person Threepence, two persons Three Halfpence each, exceeding two persons, One Penny each.

To or from ships or vessels lying opposite, westward of Greenwich, for one person Two-

pence, exceeding one person, One Penny each.

To or from ships or vessels eastward of Greenwich, after the rate of Sixpence for every half mile of distance.

To or from steam or other vessels, for passengers, for one person Fourpence, exceeding one person Threepence each, including luggage not exceeding 56lbs. for each person.

Oars Fare—Six Persons. Scullers Fare—Four Persons.

No Sculler to be compellable to go below Crawley's wharf aforesaid.

<b>PASSAGE BOATS.</b> Each Passenger.	
From London-bridge, above the said s. d.	
bridge, to Chelsea-bridge . . . . .	0 6
to Wandsworth . . . . .	0 7
to Putney, Fulham, or Barns-elms . . . . .	0 8
to Hammersmith or Chiswick . . . . .	0 9
to Barnes or Mortlake . . . . .	1 0
to Brentford . . . . .	1 3
to Isleworth . . . . .	1 3
to Richmond . . . . .	1 3
From London-bridge, below the said	
bridge to Deptford or Greenwich . . . . .	0 6
to Blackwall . . . . .	0 9
to Woolwich . . . . .	1 0
to Gravesend . . . . .	1 6
Oars Fare—Eight Passengers. Scallers	
Fare—Six Passengers.	

## WEIGHTS AND MEASURES.

### TROY WEIGHT.

24 grains make..	1 pennyweight
20 pennyweights	1 ounce
12 ounces .....	1 pound

By this weight are weighed jewels, gold, silver, and most liquids which are sold by weight.

14 ounces, 11 pennyweights, and 16 grains Troy, are equal to a pound Avirdupois.

### AVOIRDUPOIS WEIGHT.

16 drachms make.....	1 ounce
16 ounces .....	1 pound
28 pounds .....	1 quarter
4 quarters, or 112lbs.	1 cwt.
20 cwt. ....	1 ton

By this weight are weighed all coarse and heavy goods; flesh, butter, bread, and grocery wares.

### APOTHECARIES' WEIGHT.

20 grains make....	1 scruple
3 scruples .....	1 drachm
8 drachms ....	1 ounce
12 ounces .....	1 pound

### CLOTH MEASURE.

2½ inches make 1 nail	
4 nails.....	1 quarter
4 quarters ....	1 yard, or 36 inches
3 quarters ....	1 ell Flemish
5 quarters ....	1 ell English
6 quarters ....	1 ell French

### LONG MEASURE.

3 barley-corns make.....	1 inch
12 inches .....	1 foot
3 feet.....	1 yard
5 feet (a geometrical) ...	1 pace
6 feet, or 2 yards .....	1 fathom
5½ yards.....	1 rod, pole, or perch
4 poles, or 22 yards .....	1 chain
40 poles, or 10 chains.....	1 furlong
8 furlongs, or 1760 yards...	1 mile
3 miles .....	1 league

\*. In Land Measuring, the pole is divided into 25 links, each = 7.92 inches; 40 square poles are 1 rood, and 4 roods 1 acre.

### CUBIC, OR SOLID MEASURE.

1728 inches make .....	1 foot
27 feet .....	1 yard
50 feet of hewn timber	1 ton, or load

277½ inches, 1 imperial wine, ale, beer,	
or corn gallon	
2218.16 inches, 1 imperial standard bush.	

### SQUARE MEASURE.

144 inches make 1 foot	
9 feet.....	1 yard
272½ feet } .. {	1 rod of brick work
or 30½ yards } .. {	or 1 square pole
16 poles .....	1 chain
40 poles .....	1 rood
10 chains }	
or 4 roods }	1 acre
or 160 poles }	
or 4840 yards }	
640 acres .....	1 square mile

### WOOL WEIGHT.

7 lbs make .....	1 clove
2 cloves or 14lbs .....	1 stone
2 stones or 28lbs .....	1 tod
6½ tods .....	1 wey
2 weys .....	1 sack
12 sacks.. .....	1 last
N.B. In some places, 7 tods make 1 wey, and 240 pounds 1 pack	

### WINE MEASURE.

4 gills make ....	1 pint
2 pints .....	1 quart
4 quarts .....	1 gallon
10 gallons .....	1 anker of brandy
42 gallons .....	1 tierce
63 gallons .....	1 hogshead
84 gallons .....	1 puncheon
2 hogsheads ....	1 pipe or butt
2 pipes .....	1 tun

### ALE AND BEER MEASURE.

2 pints make....	1 quart
4 quarts .....	1 gallon
8 gallons .....	1 firkin of ale
9 gallons .....	1 firkin of beer
2 firkins .....	1 kilderkin
2 kilderkins ....	1 barrel
3 kilderkins .....	1 hogshead
3 barrels.....	1 butt

N.B. 48 gallons of ale, or 54 gallons of beer, make a hogshead.

### DRY MEASURE.

2 pints make .....	1 quart
2 quarts ..	1 pottle
2 pottles .....	1 gallon
2 gallons .....	1 peck
4 pecks.....	1 bushel
4 bushels .....	1 coomb
8 bushels or 2 coombs..	1 quarter
5 quarters or 10 coombs	1 wey or load
5 pecks (water measure)	1 bushel
36 bushels .....	1 chaldron

### COAL MEASURE.

4 pecks make .....	1 bushel
3 bushels .....	1 sack
9 bushels .....	1 vat, or strike
36 bushels .....	1 chaldron
21 chaldrons ....	1 score
8 Newcastle chals. or	
21 tons 4 cwt....	1 keel
20 keels, or 160 New-	
castle chaldrons..	1 ship load
8 Newcastle chalds..	15 London chs.

### MISCELLANEOUS ARTICLES.

A firkin of butter is .....	56 lbs.
A firkin of soap .....	64



A barrel of pot-ashes .....	200
A barrel of anchovies.....	30
A barrel of soap .....	256
A barrel of raisins .....	112
A fother of lead in London, 20 cwt. or .....	2240
A stone of iron.....	14
A stone of butcher's meat... ..	8
A stone of glass ....	5
A stone of hemp ..	32
A stone of cheese .....	16
A gallon of train and other oils	7½
A faggot of steel .....	120
A seam of glass is 24 stone of 5 lbs., or.....	120
A peck of salt .....	14
A bushel of salt .....	56
A ton of salt .....	42 bhs.
A quintal .....	100 lbs.
A chest of tea, about .....	84
A bag of rice.....	168
A hoghead of pilchards (about 3000 fish) .....	40 gals.
A ton of seed oil .....	236
A ton of fish oil .....	252

## HAY.

56 lbs. of old hay, and	
60 lbs. of new do. make	1 truss
36 trusses.....	1 load

## STRAW.

36 lbs. make.....	1 truss
36 trusses.....	1 load
54 trusses, or 1½ load..	1 ton

## WEIGHTS OF COINS.

The standard of Gold coin is 22 carats of fine gold and 2 carats of copper melted together.

The standard price of gold is 3*l*. 17*s*. 10½*d*. per ounce, or 46*l*. 14*s*. 6*d*. per lb. Troy.

There is no alteration either in weight or fineness from former coinages; the sovereign, or 20*s*. piece, being 20-21 parts of the weight and value of a guinea.

## Dwts. grs.

Sovereign.....	5	3.274
Half sovereign ..	2	13.637
Double-sovereign	10	6.548

The current Silver coins are of the old standard fineness, of 11 oz. 2 dwts. of pure silver to 18 dwts. of alloy; and 1 lb. Troy of this standard is now coined into 66 shillings.

## Dwts. grs.

Sixpence ....	1	19 7-11ths
Shilling.....	3	15 3-11ths
Half-crown .	9	2 2-11ths
Crown .....	18	4 4-11ths

A TABLE OF INTEREST FOR DAYS at 5 per cent.

Days.	£1	£2	£3	£4	£5	£6	£7	£8	£9	£10
	d. f.	d. f.	d. f.	d. f.	d. f.	d. f.	d. f.	d. f.	d. f.	d. f.
1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1	0 1	0 1
2	0 0	0 0	0 0	0 1	0 1	0 1	0 1	0 2	0 2	0 2
3	0 0	0 0	0 1	0 1	0 1	0 2	0 2	0 3	0 3	0 3
4	0 0	0 1	0 1	0 2	0 2	0 3	0 3	1 0	1 0	1 1
5	0 0	0 1	0 1	0 2	0 3	0 3	1 0	1 1	1 1	1 2
6	0 0	0 1	0 2	0 3	0 3	1 0	1 1	1 2	1 3	1 3
7	0 0	0 1	0 2	0 3	1 0	1 1	1 2	1 3	2 0	2 1
8	0 1	0 2	0 3	1 0	1 1	1 2	1 3	2 0	2 1	2 2
9	0 1	0 2	0 3	1 1	1 2	1 3	2 0	2 1	2 2	2 3
10	0 1	0 2	0 3	1 1	1 2	1 3	2 1	2 2	2 3	3 1
11	0 1	0 2	1 0	1 1	1 3	2 0	2 2	2 3	3 1	3 2
12	0 1	0 3	1 0	1 2	1 3	2 1	2 3	3 0	3 2	3 3
13	0 1	0 3	1 1	1 2	2 0	2 2	2 3	3 1	3 3	4 1
14	0 1	0 3	1 1	1 3	2 1	2 3	3 0	3 2	4 0	4 2
15	0 1	0 3	1 1	1 3	2 1	2 3	3 1	3 3	4 1	4 3
16	0 2	1 0	1 2	2 0	2 2	3 0	3 2	4 0	4 2	5 1
17	0 2	1 0	1 2	2 0	2 3	3 1	3 3	4 1	5 0	5 2
18	0 2	1 0	1 3	2 1	2 3	3 2	4 0	4 2	5 1	5 3
19	0 2	1 0	1 3	2 1	3 0	3 2	4 1	4 3	5 2	6 0
20	0 2	1 1	1 3	2 2	3 1	3 3	4 2	5 1	5 3	6 2
21	0 2	1 1	2 0	2 3	3 1	4 0	4 3	5 2	6 0	6 3
22	0 2	1 1	2 0	2 3	3 2	4 1	5 0	5 3	6 2	7 0
23	0 3	1 2	2 1	3 0	3 3	4 2	5 1	6 0	6 3	7 2
24	0 3	1 2	2 1	3 0	3 3	4 2	5 2	6 1	7 0	7 3
25	0 3	1 2	2 1	3 1	4 0	4 3	5 3	6 2	7 1	8 0
26	0 3	1 2	2 2	3 1	4 1	5 0	5 3	6 3	7 2	8 2
27	0 3	1 3	2 2	3 2	4 1	5 1	6 0	7 0	7 3	8 3
28	0 3	1 3	2 3	3 2	4 2	5 2	6 1	7 1	8 1	9 0
29	0 3	1 3	2 3	3 3	4 3	5 2	6 2	7 2	8 2	9 2
30	0 3	1 3	2 3	3 3	4 3	5 3	6 3	7 3	8 3	9 3
31	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0	10 0

\*\*\* To find the interest at any other rate: Multiply the interest at 5 per cent. by twice the rate required, and divide by 10.

A TABLE OF INTEREST FOR MONTHS at 5 per cent.

	1 Month.	2 Months.	3 Months.		1 Month.	2 Months.	3 Months.
£	£ s. d.	£ s. d.	£ s. d.	£	£ s. d.	£ s. d.	£ s. d.
1	0 0 1	0 0 2	0 0 3	60	0 5 0	0 10 0	0 15 0
2	0 0 2	0 0 4	0 0 6	70	0 5 10	0 11 8	0 17 6
3	0 0 3	0 0 6	0 0 9	80	0 6 8	0 13 4	1 0 0
4	0 0 4	0 0 8	0 1 0	90	0 7 6	0 15 0	1 2 6
5	0 0 5	0 0 10	0 1 3	100	0 8 4	0 16 8	1 5 0
6	0 0 6	0 1 0	0 1 6	200	0 16 8	1 13 4	2 10 0
7	0 0 7	0 1 2	0 1 9	300	1 5 0	2 10 0	3 15 0
8	0 0 8	0 1 4	0 2 0	400	1 13 4	3 6 8	5 0 0
9	0 0 9	0 1 6	0 2 3	500	2 1 8	4 3 4	6 5 0
10	0 0 10	0 1 8	0 2 6	600	2 10 0	5 0 0	7 10 0
20	0 1 8	0 3 4	0 5 0	700	2 18 4	5 16 8	8 15 0
30	0 2 6	0 5 0	0 7 6	800	3 6 8	6 13 4	10 0 0
40	0 3 4	0 6 8	0 10 0	900	3 15 0	7 10 0	11 5 0
50	0 4 2	0 8 4	0 12 6	1000	4 3 4	8 6 8	12 10 0

TABLE TO CALCULATE WAGES AND OTHER PAYMENTS.

Y	P. Mo.	Pr. Week	Pr. D.	Y	P. Mo.	Pr. Week	Pr. D.	Y	P. Mo.	Pr. Week	Pr. D.
l.	l.	s.	d.	l.	l.	s.	d.	l.	l.	s.	d.
1	0	1	8	0	0	4	0	0	0	0	0
2	0	3	4	0	0	9	0	0	0	0	0
3	0	5	0	0	1	1	0	0	0	0	0
4	0	6	8	0	1	6	0	0	0	0	0
5	0	8	4	0	1	11	0	0	0	0	0
6	0	10	0	0	2	3	0	0	0	0	0
7	0	11	8	0	2	8	0	0	0	0	0
8	0	13	4	0	3	0	0	0	0	0	0
9	0	15	0	0	3	5	0	0	0	0	0
10	0	16	8	0	3	10	0	0	0	0	0
11	0	18	4	0	4	0	0	0	0	0	0
12	0	19	0	0	4	5	0	0	0	0	0
13	0	20	8	0	4	10	0	0	0	0	0
14	0	22	4	0	5	0	0	0	0	0	0
15	0	23	0	0	5	5	0	0	0	0	0
16	0	24	8	0	5	10	0	0	0	0	0
17	0	26	4	0	6	0	0	0	0	0	0
18	0	27	0	0	6	5	0	0	0	0	0
19	0	28	8	0	6	10	0	0	0	0	0
20	0	30	4	0	7	0	0	0	0	0	0
21	0	31	0	0	7	5	0	0	0	0	0
22	0	32	8	0	7	10	0	0	0	0	0
23	0	34	4	0	8	0	0	0	0	0	0
24	0	35	0	0	8	5	0	0	0	0	0
25	0	36	8	0	8	10	0	0	0	0	0
26	0	38	4	0	9	0	0	0	0	0	0
27	0	39	0	0	9	5	0	0	0	0	0
28	0	40	8	0	9	10	0	0	0	0	0
29	0	42	4	0	10	0	0	0	0	0	0
30	0	43	0	0	10	5	0	0	0	0	0
31	0	44	8	0	10	10	0	0	0	0	0
32	0	46	4	0	11	0	0	0	0	0	0
33	0	47	0	0	11	5	0	0	0	0	0
34	0	48	8	0	11	10	0	0	0	0	0
35	0	50	4	0	12	0	0	0	0	0	0
36	0	51	0	0	12	5	0	0	0	0	0
37	0	52	8	0	12	10	0	0	0	0	0
38	0	54	4	0	13	0	0	0	0	0	0
39	0	55	0	0	13	5	0	0	0	0	0
40	0	56	8	0	13	10	0	0	0	0	0
41	0	58	4	0	14	0	0	0	0	0	0
42	0	59	0	0	14	5	0	0	0	0	0
43	0	60	8	0	14	10	0	0	0	0	0
44	0	62	4	0	15	0	0	0	0	0	0
45	0	63	0	0	15	5	0	0	0	0	0
46	0	64	8	0	15	10	0	0	0	0	0
47	0	66	4	0	16	0	0	0	0	0	0
48	0	67	0	0	16	5	0	0	0	0	0
49	0	68	8	0	16	10	0	0	0	0	0
50	0	70	4	0	17	0	0	0	0	0	0
51	0	71	0	0	17	5	0	0	0	0	0
52	0	72	8	0	17	10	0	0	0	0	0
53	0	74	4	0	18	0	0	0	0	0	0
54	0	75	0	0	18	5	0	0	0	0	0
55	0	76	8	0	18	10	0	0	0	0	0
56	0	78	4	0	19	0	0	0	0	0	0
57	0	79	0	0	19	5	0	0	0	0	0
58	0	80	8	0	19	10	0	0	0	0	0
59	0	82	4	0	20	0	0	0	0	0	0
60	0	83	0	0	20	5	0	0	0	0	0
61	0	84	8	0	20	10	0	0	0	0	0
62	0	86	4	0	21	0	0	0	0	0	0
63	0	87	0	0	21	5	0	0	0	0	0
64	0	88	8	0	21	10	0	0	0	0	0
65	0	90	4	0	22	0	0	0	0	0	0
66	0	91	0	0	22	5	0	0	0	0	0
67	0	92	8	0	22	10	0	0	0	0	0
68	0	94	4	0	23	0	0	0	0	0	0
69	0	95	0	0	23	5	0	0	0	0	0
70	0	96	8	0	23	10	0	0	0	0	0
71	0	98	4	0	24	0	0	0	0	0	0
72	0	99	0	0	24	5	0	0	0	0	0
73	0	100	8	0	24	10	0	0	0	0	0
74	0	102	4	0	25	0	0	0	0	0	0
75	0	103	0	0	25	5	0	0	0	0	0
76	0	104	8	0	25	10	0	0	0	0	0
77	0	106	4	0	26	0	0	0	0	0	0
78	0	107	0	0	26	5	0	0	0	0	0
79	0	108	8	0	26	10	0	0	0	0	0
80	0	110	4	0	27	0	0	0	0	0	0
81	0	111	0	0	27	5	0	0	0	0	0
82	0	112	8	0	27	10	0	0	0	0	0
83	0	114	4	0	28	0	0	0	0	0	0
84	0	115	0	0	28	5	0	0	0	0	0
85	0	116	8	0	28	10	0	0	0	0	0
86	0	118	4	0	29	0	0	0	0	0	0
87	0	119	0	0	29	5	0	0	0	0	0
88	0	120	8	0	29	10	0	0	0	0	0
89	0	122	4	0	30	0	0	0	0	0	0
90	0	123	0	0	30	5	0	0	0	0	0
91	0	124	8	0	30	10	0	0	0	0	0
92	0	126	4	0	31	0	0	0	0	0	0
93	0	127	0	0	31	5	0	0	0	0	0
94	0	128	8	0	31	10	0	0	0	0	0
95	0	130	4	0	32	0	0	0	0	0	0
96	0	131	0	0	32	5	0	0	0	0	0
97	0	132	8	0	32	10	0	0	0	0	0
98	0	134	4	0	33	0	0	0	0	0	0
99	0	135	0	0	33	5	0	0	0	0	0
100	0	136	8	0	33	10	0	0	0	0	0

If the Wages be Guineas instead of Pounds, for each Guinea add one Penny, to each Month, or one Farthing to each Week.

A TABLE OF THE COMMENCEMENT OF THE ROYAL REIGNS.

## ENGLAND.

William Conqueror	1066	Oct. 14
William Rufus	1087	Sept. 9
Henry 1	1100	Aug. 1
Stephen	1135	Dec. 1
Henry 2	1154	Oct. 25
Richard 1	1189	July 6
K. John	1199	April 6
Henry 3	1216	Oct. 19
Edward 1	1272	Nov. 16
Edward 2	1307	July 7
Edward 3	1327	Jan. 25
Richard 2	1377	June 21
Henry 4	1399	Sept. 29
Henry 5	1413	Mar. 20
Henry 6	1422	Aug. 31
Edward 4	1461	Mar. 4
Edward 5	1483	Apr. 9

Richard 3	1483	June 22
Henry 7	1485	Aug. 22
Henry 8	1502	Apr. 22
Edward 6	1547	Jan. 23
Q. Mary	1553	July 6
Q. Elizab.	1558	Nov. 17
James 1	1603	Mar. 24
Charles 1	1625	Mar. 27
Charles 2	1649	Jan. 30
James 2	1685	Feb. 6
William and Mary	1689	Feb. 13
Q. Anne	1702	Mar. 8

## GREAT BRITAIN.

Union of England & Scotland	1707	May 1
George 1	1714	Aug. 1
George 2	1727	June 11
George 3	1760	Oct. 25
George 4	1820	Jan. 29
Union of Great Britain and Ireland	1801	Jan. 1

END OF THE BRITISH ALMANAC.

♦♦ The British Almanac for 1830 will be published in November 1829.

THE  
**Companion to the Almanac,**  
 OR  
**YEAR-BOOK**  
 OF  
**GENERAL INFORMATION;**  
 FOR  
**1829.**

*PUBLISHED UNDER THE SUPERINTENDENCE OF THE SOCIETY  
 FOR THE DIFFUSION OF USEFUL KNOWLEDGE.*

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## PRELIMINARY OBSERVATIONS.

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THE Companion to the Almanac for 1828, contained the following passage :—

“This publication cannot embrace every subject upon which an intelligent reader, or observer of passing events, may want a ready Manual of Reference. But it is evident that, by annually varying the contents of this little work, a body of most important information may be gradually collected ;—and a record preserved of the most permanent features of the passing year. The Conductors, therefore, beg to impress upon the purchasers of the Companion, that it is not a mere temporary work ; and they entreat them to preserve it as the first of a Series, to be annually Published, with such improvements as will naturally arise out of a diligent and systematic collection of the various facts that appear of the most consequence to be generally diffused, as auxiliary to the great object of increasing the ability to acquire *Useful Knowledge*.”

A reference to the Contents of the present Companion, as compared with those of the Companion for 1828, will shew that, while the general plan of the work has been preserved, no article of the former volume is here reprinted.

The *first* part, as before, contains a variety of information more immediately supplementary to an Almanac ;—such as the history of Almanacs in general, and of the Nautical Almanac in particular ;—Calendars of the Jews and Mahometans ;—Modes of finding Easter ;—a paper on Comets, in which the Encke Comet, now attracting the attention of the scientific world, is particularly noticed ;—and observations of a Naturalist, during the several months.

The *second* part relates to Chronology and Statistics, generally. The necessary imperfection of Chronological Tables which attempt to embrace every subject, has suggested the propriety of dividing the matters for Chronological illustration ;—thus a Table has been now given of Discoveries in Natural Philosophy, which may be succeeded by a similar Table applying to Natural History.

The information on Statistics has been rendered much fuller in the present than in the previous volume. The Committee of the Society for the Diffusion of Useful Knowledge conceive that it is of the first importance that a great body of authentic facts, relating to Population, Crime, Education, and other subjects affecting the general welfare of the community, should be gradually collected and reduced to a popular form;—and the annual publication of this work induces them to make it the vehicle for disseminating the knowledge of such facts as those now given, which are constantly varying, both from the nature of the subjects themselves, and the greater accuracy with which they are investigated.

The *third* part is composed, as before, of several short chapters of Information and Advice, -on subjects which require to be generally known. To some, these details may appear of too humble a nature to occupy their attention. But let it be remembered that such matters as are here handled are of the greatest importance to the welfare of all, and of the working classes in particular; and that their real Usefulness will always compensate for their apparent homeliness.

The *fourth* part, which is entirely a Retrospect of many important particulars of the closing year, has also been extended;—and this extension has principally caused the addition of fifty-six pages to the work, and the consequent increase of sixpence in its price. The Acts of Parliament have been very carefully abridged; and those Statutes, or clauses of Statutes, are alone omitted, which are not important to be generally known, relating only to subjects in which very few persons are interested, and who will necessarily obtain information upon them from other sources. The Parliamentary Returns have been also given more fully as to their number, but have been as much condensed as was compatible with their utility. Various information from the valuable Reports of Parliament will be found scattered throughout the volume;—and a complete Chronicle of the Proceedings of the two Houses has also been given. In this, as in the Chronicle of the Events of the Year, the facts are stated without any comment.

The two great objects which have been kept in view throughout the work, are,—1st. that the subjects selected shall be generally useful, either for present information, or future reference;—2dly, that the knowledge conveyed shall be given in the most condensed and explicit manner, so as to be valuable to every class of readers.

*December 24, 1828.*

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# COMPANION TO THE ALMANAC.

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## PART I.

INFORMATION CONNECTED WITH THE CALENDAR, THE CELESTIAL CHANGES, AND THE NATURAL PHENOMENA OF THE YEAR.

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### I. ALMANACS.

THE history of Almanacs, and even the etymology of the word Almanac, are involved in considerable obscurity. By some, the name is derived from the Arabic *al manach*, to count. Verstegan, an author who has written on the antiquities of our own country, under the title of "The Restitution of Decayed Intelligence concerning Britaine," makes the word of German origin, *Almonat*; and says that our Saxon ancestors were in the practice of carving the annual courses of the moon upon a square piece of wood, which they called *Almonaught*—(al-moon-heed). There are several very splendid English Almanacs, of the fourteenth century, existing in MS., particularly in the British Museum. A very curious specimen of these early Almanacs is in the Library of Corpus Christi College, Cambridge. Almanacs became generally used in Europe, within a short time after the invention of printing; and they were very early remarkable, as some are now in England, for the mixture of truth and falsehood which they contained. In 1579, their effects in France were found so mischievous, from the pretended prophecies which they published, that an edict was promulgated by Henry III., forbidding any predictions to be inserted in them relating to civil affairs, whether those of the state or of private persons. No such law was ever enacted in England. It is singular that the earliest English Almanacs were printed in Holland, on small folio sheets; and these have occasionally been preserved, from having been pasted within the covers of old books. In the reign of James I. letters patent were granted to the two Universities and the Stationers' Company, for an exclusive right of printing almanacs. These, in 1775, were declared to be illegal. During the civil wars of Charles I., and thence onward to our own times, English Almanacs became conspicuous for the unblushing boldness of their astrological predictions, and their determined perpetuation of popular errors. At the present day none of the Almanacs of the continental states contain any misleading matters of this nature;—and the Almanacs most similar to some of those extensively circulated amongst our intelligent fellow-countrymen are produced in Persia. A modern Persian Almanac is thus described in the *Encyclopædia Metropolitana*:—"The first page contains a list of fortunate days for certain purposes; as, for example, to buy, to sell, to take medicine, to marry, to go a journey, &c. &c.; then follow predictions of events, as earthquakes, storms, political

affairs, &c., after the manner of Moore's Almanac, except being apparently more concise." This resemblance between the productions of a highly-cultivated nation, and one which is remarkable for its general ignorance, is certainly no proof of our boasted emancipation from ancient prejudices.

Our popular superstitions with regard to the weather—the lingering belief, in which some still indulge, of the doctrine of nativities—and the settled opinion in a few minds, that what are called malignant aspects of the stars, as well as comets and meteors, portend evils to mankind, were the most cherished convictions of our Anglo-Saxon ancestors;—and it may not be entirely fanciful to consider the prevalence of such notions still among us, as shoots of the tree of ancient prognostication. Mr. Sharon Turner, in his *History of the Anglo-Saxons*, has an interesting passage upon this subject:—

"Their prognostics, from the sun and moon, from thunder, and from dreams, were so numerous, as to display and to perpetuate a most lamentable debility of mind. Every day of every month was catalogued as a propitious or unpropitious season for certain transactions. We have Anglo-Saxon treatises which contain rules for discovering the future fortune and disposition of a child, from the day of his nativity. One day was useful for all things; another, though good to tame animals, was baleful to sow seeds. One day was favourable to the commencement of business; another to let blood; and others wore a forbidding aspect to these and other things. On this day they were to buy, on a second to sell, on a third to hunt, on a fourth to do nothing. If a child was born on such a day, it would live; if on another, its life would be sickly; if on another, it would perish early. In a word, the most alarming fears, and the most extravagant hopes, were perpetually raised by these foolish superstitions, which tended to keep the mind in the dreary bondage of ignorance and absurdity, which prevented the growth of knowledge, by the incessant war of prejudice, and the slavish effects of the most imbecile apprehensions."

Many of our English Almanacs have had no inconsiderable share in keeping alive errors like those of a thousand years ago—errors which are equally opposed to the progress of knowledge, and to a pious confidence in the wisdom and goodness of an Almighty Providence. It may be curious, and not uninteresting, to observe how very similar are the prejudices which still maintain a decrepit existence among us, to those of our forefathers; and how very little the general progress of education has done towards the destruction of evil publications which long habit has rendered popular. We will take the Almanacs of 1678, (the year the Habeas Corpus Act was passed, in the reign of Charles II.)—of 1771, (the eleventh year of the reign of George III.)—and those of 1829, which have just been published.

The most famous "Astrologer" of the seventeenth century was William Lilly. He began to print his Ephemeris in 1644, during the greatest heat of the civil wars. He uses many hard words and much Latin in his predictions;—and constantly invokes the Divine assistance to deduce a judgment of things to come, from

what he calls "*rational* and experimental grounds of art." The year 1677 had been distinguished by the appearance of a comet; and of course this is a fruitful subject with Lilly, whose business was to fill the minds of men with superstitious fears. He says, "all comets signifie wars, terrors, and strange events in the world." The venerable Bede, more than eight hundred years before him, had affirmed that comets "portend change of kingdoms, or pestilence, or wars, or tempests, or droughts."—Lilly explains the prophetic character of these bodies very curiously: "the *spirits*, well knowing what accidents shall come to pass, do form a star or comet, and give it what figure or shape they please, and cause its motion through the air, that people might behold it, and thence draw a signification of its events." What is called the murrain was very common in those days, when the diseases of cattle as well as men were imperfectly understood; and, therefore, a comet, or blazing star, appearing in the sign Taurus, "portends," according to this crafty astrologer, "mortality to the greater sort of cattle, as horses, oxen, cows, &c." But the comet has not only to answer for this mischief, but it also portends "prodigious shipwracks, damage in fisheries, monstrous floods, and destruction of fruit by caterpillars and other vermine,"—evils which the most superstitious of men have now pretty well agreed to refer to their natural causes. Comets, according to Lilly, also produce "very hard and nipping weather, frosty, dark, cloudy, much snow and wind, strange or unusual hail and tempest." This is absurd enough; but it is not more absurd than an assertion that Saturn, the planet which, with the exception of Uranus, is the most distant from the sun, should produce storms and tempests in January 1829, by its influence on that luminary. The following passage occurs in the first page of Moore's Almanac for 1829.

"Saturn a direful ray  
From Cancer's lofty mount  
Darts at the King of day,  
And clouds on that account  
Will sure pervade our wintry skies,  
And storms and tempests soon shall rise."

But this prophecy about the influence of Saturn upon the weather is by no means original. In Tanner's *Ephemeris* for 1678, we are told, in December,—

"Just at beginning Saturn's cloudy eye  
Caused a very dark and cloudy skie."

The modern falsehood is only different from being clothed in more lofty language.

The natural causes of Eclipses are now pretty generally known; and even the most ignorant of mankind, in civilized countries, have ceased to consider that they either produce, or are prophetic of evil. The certainty with which their exact time can be calculated is a beautiful exemplification of the truth of the great principles of the science of Astronomy. In this work for 1828, the folly of any superstition arising out of eclipses was exhibited. Almanacs, even to our own day, attempt to keep up the popular delusion upon such subjects; and the following parallel instances will show the little variation in the cheat:—

JOHN LORD'S ALMANAC, and PROGNOSTICATOR for 1678.	JOHN PARTRIDGE'S MERLINUS LIBRATUS, an ALMANAC for 1829.
<p>"The fourth eclipse of the moon on October, the 19th day. This threateneth great and rich men with loss of goods, or decay of substance, likewise death and diseases among cattel, beasts, and sheep, and such as chew the cud; also dearness of corn and seed sown upon the earth: this will or may chiefly belong to Ireland, Russia, Polonia the Great, and such others as are under Taurus."</p>	<p>"October, 1829. The late visible eclipse of the moon, which happened in the latter part of the sign ♄, may be considered to relate to Portugal and Spain, betokening insurrections, troubles, and discords amongst the common people, with mutinies amongst the soldiers, &amp;c."</p>

Our ancestors had a great many ridiculous notions about the possibility of prognosticating the future condition of the weather, from the state of the atmosphere on certain festival days. The festival of the Circumcision (January 1) was thus supposed to afford an evidence of the weather to be expected in the coming year. For St. Vincent's day (January 22) there is an ancient admonition to note down whether the sun shine. The Conversion of St. Paul (January 25) was considered throughout Europe as particularly ominous, not only of future weather, but of coming events; and there were some Latin rhymes of the middle ages to this effect, which the English prognosticators thus rendered:—

"If St. Paul's day be faire and cleare  
It doth betide a happy yeare:  
But if by chance it then should raine  
It will make deare all kinds of graine:  
And if the clouds make dark the skie  
The neate and foule this year shall die:  
If blustering winds do blow aloft  
Then wars shall trouble the realm full oft."

Candlemas day (February 2) supplied another of these irrational inferences from the weather of one day to that of a distant period:

"If Candlemas day be fair and bright  
Winter will have another flight;  
But if Candlemas day be clouds and rain  
Winter is gone and will not come again."

A few of these notions are still prevalent in remote districts. Mrs. Grant, in her account of the Superstitions of the Highlands, says, that if the days between the 11th and 14th of February are particularly stormy, the prognostic for the weather of the coming year is most favourable. In many parts of Germany there is a belief that if St. Urban's day (May 25) be fair and calm, there will be a good vintage. The prognostications connected with St. Swithin's day (July 15) have kept the firmest hold upon the popular mind. A continuance of rainy weather generally takes place about this period; but the belief that if it rain on that day the rain will continue for forty days, is as absurd as any of the other prejudices we have mentioned. Ben Jonson laughs at the notion in one of his plays\*, where a character, looking into his *penny* almanac, (almanacs were sold at a *penny* then, as they are to this day at Hamburgh), says, "O here, *St. Swithin's, the 15th day, variable weather, for the most part rain, good!—for the most part rain?* why, it should rain forty days after, more or less; it was a rule

\* 'Every Man out of his Humour,' Act, I, Scene I.

held afore I was able to hold a plough, and yet here are two days no rain: ha! it makes me muse."

We have mentioned these silly notions of former times, to observe how very nearly they have become eradicated by the real knowledge produced by a wider diffusion of education. But it is not so with the weather prophecies of the almanacs. They still continue to be printed, as in the days of Lilly; and are still believed by hundreds and thousands of credulous farmers and country people, who have their hay and corn too often spoiled through their reliance on these false predictions. That they contain as little novelty as wisdom, may be seen from the following extracts for the month of JUNE:

	SHEPHERD'S ALMANAC, 1678.	MOORE'S ALMANAC, 1771.	MOORE'S ALMANAC, 1829.
5	Winds and rain at the beginning of the month.	A close air with drizzling showers. Fair and clear, but soon it lowers.	Intervals of fair weather.
10	Winds and rain about this time	And now, my friends, you may again expect winds, thunder, and showers of rain. But now again it seems the air is moderate, serene and clear. Sultry and hot some days together. But then comes some windy weather. But at this time the case is plain, we shall have pleasant showers of rain. But the air clears up, and is fair again.	A moist atmosphere, attended with rain and thunder in many places. Fair and hot;— charming weather for forwarding vegetation.
15	Some thunder about this time.		
20	Blustering storms of wind and rain.		
25	Some storms of rain & good weather intervened.		
30			

According to these several prophecies of 1678, 1771, and 1829, rain and thunder invariably take place from the 10th to the 20th of June. It is perfectly impossible that these predictions can be anything but mere guesses; often, of course, very false guesses,—and guesses certainly not applicable, if they even approached the truth, to all parts of the kingdom,—for it may rain in a mountainous country, and be fine in the neighbouring plain, on the same day. We know from scientific observation, that in the month of June the atmosphere is at its highest point of dryness, and that the average number of days on which rain falls is lower than the average of any other month of the year. With these established facts to contradict the prophecy, it is predicted by Moore's Almanac, that from the 10th to the 20th of June in the year 1829, the atmosphere will be moist, with rain and thunder in many places. If any farmer believe this nonsense, it is highly probable that from the 10th to the 20th of June he may lose some days of actual fine weather, in the dread of the rain which the almanac predicts, and thus his hay will remain on the ground, instead of being safely in the rick; and, further, that when he hopes for the fine weather which the same almanac ensures from the 24th to the end of the month, he may experience a heavy rain, and be driven on to the periodical rains of the middle of July, with no consolation for his losses but the conviction that it is better to trust to common-sense and experience, than to false predictions, expressly manufactured to impose upon the ignorant.

The "Astrological Predictions of Mundane Affairs," with which the most popular of our almanacs are still illuminated, are not

more distinguished for veracity than their predictions of the weather. We do not suppose that many persons seriously believe in these absurdities; yet when they are perused by many thousands, as they still are, it is impossible that the mind should be able wholly to resist the influence of the deception; and in proportion as such thoughts find a place in the mind, will sound knowledge and a pure love of truth be shut out. As a matter of curious interest, we shall again give a specimen from the almanacs before us, of the little variation which has prevailed for one hundred and fifty years in the language of imposture:—

ANDREWS' NEWS FROM THE STARS, 1678, JULY.	MOORE'S ALMANAC, 1771, JULY.	MOORE'S ALMANAC, 1829, JULY.
Sudden fears possess some Places—Jupiter turns retrograde, and Mars comes to conjunction with Saturn at the month's end. Weighty matters under consideration in some parts of Europe. Flying reports from beyond sea. Those places under Gemini again concerned. The influence both of Saturn and Mars they are perhaps now sensible of, to their detriment or disturbance.	There is some bustle in the world about this time, and where armies are blows must be expected. Jove affronts both the Sun and Mercury, and some sly contrivance brought to light. I hope no holy plot. Some good news from abroad about this time; and some ships despaired of likely to come home safe.	In this month there are no less than five conjunctions, three of which happen in the ascendant of Rome, the very focus of papal powers, and a fourth on the verge of that sign. Here is a concatenation of circumstances; the effects of which may be expected to produce serious events in the Catholic church—perhaps the death of his Holiness.

It cannot fail to be perceived that the tone of these predictions is not in the slightest degree altered by the progress of knowledge. The prophecy for 1829 would read just as consistently in the Almanac of 1678; and that of 1771 would be just as reasonable and true, if transposed to 1829. Indeed, we have observed in our inquiries into this subject, that the very slightest changes fit the predictions of a past year for revival, in some future attempt at delusion. It is really wonderful that such a clumsy imposture should so long have held a place amongst a thinking people. Several gross improprieties, however, have within the last year been removed from the old almanacs; and it is observable that their attempts at delusion are very much softened. It is to be desired that all astrological predictions should be removed from these productions; and they may then fairly be considered as amongst the most useful works of reference. We earnestly desire to see them become instruments of good, instead of continuing vehicles of evil.

## II. THE NAUTICAL ALMANAC.

THIS work, which is published yearly, by authority, and exempted from that heavy stamp duty which is imposed upon other almanacs, owed its commencement, and the character that it at once obtained as the most accurate and valuable celestial index to the year, to the talents and zeal of the late Dr. Maskelyne. The labours of that illustrious individual left but little to be done, except what could be effected by finer instruments; and the assistance of the more

perfect tables of the lunar and planetary inequalities, that have since been constructed.

Dr. Maskelyne was what may be called an enthusiastic astronomer; and the eclipse of 1748, which happened when he was about sixteen years old, is said to have drawn the attention of him and Lalande to the study of the science. The Doctor was appointed Astronomer Royal in 1764; and having previously been several voyages for astronomical purposes, in which he paid great attention to navigation, and felt the imperfection of the existing books, he immediately published *The British Mariner's Guide*, and laid before the other commissioners of the Board of Longitude the plan of the Nautical Almanac, which he proposed should be drawn up with the utmost care, and have its accuracy guaranteed by the responsibility of the Board. The almanac was commenced in 1767, and in the same year, the "Requisite tables" made their appearance; the two together forming by far the most useful manual that had ever been given to seamen. During the forty-eight years that Dr. Maskelyne held the office of Astronomer Royal, he devoted the most sedulous attention to the almanac, availing himself of every discovery or correction, the truth of which could be depended upon.

The principal objects of the Nautical Almanac are to enable the mariner to find the place of a ship at sea, and to assist the practical astronomer in the daily routine of his observatory.

The Almanac, properly so called, consists of 144 pages, twelve being allotted to each month.

The *first* page contains a common Calendar; the days of the week, the terms and holidays, the phases of the moon, and other remarkable phenomena—such as eclipses, and the occultations of stars by the moon or the planets.

The *second* table contains, for the noon of each day (which with astronomers is the commencement of it), the sun's longitude in signs and degrees to the nearest second; the sun's right ascension in time, to tenths of seconds; the sun's declination in degrees to the nearest second, with its daily variation; and the equation of time to tenths of seconds, with its daily variation to the same. The times that are inserted in this and the other tables, are those for the meridian of the Royal Observatory at Greenwich.

The sun's longitude is of use in verifying many of the tables, and also in finding the angular distance of the moon from the sun, at those times for which it is not set down in the almanac. The sun's right ascension is useful for finding time by the apparent motion of the stars; the sun's declination is essential in finding the latitude by solar observation; and the equation of time enables one to reduce the apparent or variable time, shown by the sun or a sun-dial, to mean-time, or that shown by a well-regulated clock.

The *third* page consists of two tables. That at the top shows for every sixth day, beginning with the first,—the time of the sun's semidiameter passing the meridian, to tenths of a second; the sun's semidiameter, in measure, to tenths of a second of space; the sun's hourly motion, to tenths of a second; the logarithmic dis-

tance of the sun, and the longitude or place of the moon's node (the point where her orbit crosses the plane of that of the earth) to the nearest minute, all of which are useful in making or correcting observations. The second table, on the third page, contains the time, to seconds, of the eclipses of Jupiter's satellites,—the immersion into the shadow of the planet, or the emersion from it, being stated according as the one or the other are visible. On land, and with instruments sufficiently delicate, the eclipses of Jupiter's satellites form a very good mean of ascertaining the longitude; but they have not yet been made available for that purpose at sea.

The *fourth* page contains the *Heliocentric* (as if they were seen from the sun), and the *Geocentric* (as they are seen from the earth) latitudes and longitudes of the six planets, with their declinations, their right ascensions in time, and their times of passing the meridian, every third day for Mercury, every tenth for the Georgian, and every sixth for the four other planets. These are of course useful in enabling one to find the planets. It is to be hoped that the four small planetary bodies, Vesta, Juno, Ceres, and Pallas, which occupy the interval between Mars and Jupiter, will soon be allowed to take their stations in the Almanac.

The *fifth* page contains, for the noon and midnight of every day, the moon's longitude and latitude, to the nearest second; the *sixth* contains the moon's age, passage of the meridian, and right ascension for the noon and midnight of every day, and declination for the same to the nearest second; and the *seventh* contains the moon's semidiameter and horizontal parallax, for the noon and midnight of every day, in minutes and seconds, with the proportional logarithms of the horizontal parallax.

The *eighth* and *ninth* pages contain the distances of the centre of the moon from the centre of the sun, or from any one of the nine remarkable stars near the ecliptic, which may be convenient for observation, situated on the east side of the moon; and the *tenth* and *eleventh* contain the same with regard to the west side of the moon. These distances are shown for every three hours; and the particular stars vary with the seasons, and also with the age of the moon. These tables, in which the distances are calculated to the nearest second, are useful in enabling an observer to obtain the time at Greenwich, which corresponds to that at the place where he makes his observations; and thence to ascertain his longitude. The distances of the moon from Venus, Mars, Jupiter, and Saturn, have been published by Schumacher, the indefatigable astronomer of Altona, and would certainly be a most useful addition to this part of the Almanac.

The *twelfth* and last page for the month gives a representation of the satellites of Jupiter, with respect to that planet, at some convenient time of the night.

Such are the regular contents of the Nautical Almanac, which may be estimated as, in general, forming about half the volume.

The appended matter varies; but it is generally of a useful character. That for 1829, besides Dr. Maskelyne's explanation, contains some very valuable tables;—a table of atmospherical



refractions, a table of second differences, a table of the true places of the sixty standard stars for every tenth day throughout the year, and elements for finding the occultations of the principal stars by the moon, for each month during the year. To these are added a method of finding the latitude, from the angular distance of the sun and moon, or of the moon and a star, or of two stars.

At the commencement of the work, the places of the sun and moon were computed from the tables of Mayer of Gottingen, which had been purchased in manuscript from his widow by the Board, and the theorems supplied by the celebrated Euler. They were greatly superior to any that had been previously composed, and their publication, in 1770, was a most valuable addition to astronomical knowledge. Till the year 1804, the place of the sun continued to be computed from Mayer's tables; but that of the moon from improvements on them, made, first in 1774, and again in 1780, by Mr. Charles Mason, founded on the excellent observations of Bradley. The distances of the stars from the moon were given from tables computed for each star. The places of the planets, from 1780 to 1804, were calculated from tables contained in Lalande's astronomy; and the times of the eclipses of Jupiter's satellites were from the tables of Wargentin. The improvements introduced by Lalande, in the third edition of his Astronomy, were also afterwards taken advantage of, as well as the general improvements and corrections by Laplace and Delambre. In 1806, the publication of the French tables, constructed by Burg, afforded an improvement, which first made its appearance in the Almanac for 1813. Since the death of Maskelyne, the results of his numerous and accurate observations, and the tables of Pearson, Groombridge, Baily, and Professor Vince, have been turned to account; the tables of Burckhardt and Delambre have also been made use of; and subsequently a column has been added to the almanac, showing the differences of the sun's declination for each day throughout the year.

The Nautical Almanac is always published three years in advance. Thus the Almanac for 1829 was published in 1826. This arrangement is principally for the convenience of navigators on distant stations. That the maritime wealth and strength of this country have derived much advantage from the Nautical Almanac, cannot be doubted; nor is its value confined to this country, for it is republished in the United States. But, on the other hand, that it is susceptible of considerable improvement cannot be denied. The excellence of modern instruments, the superior education of the present race of seamen, and the zeal with which practical astronomy is now cultivated, loudly claim the interference of the Government, in order to render it worthy of the national character.

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### III. CORRESPONDENCE OF ANCIENT ERAS WITH THE VULGAR ERA, &c.

The year of the Julian period . . . . .	6542
From the first Olympiad . . . . .	2605
From the foundation of Rome, according to Varro . . . . .	2582
From the epoch of Nabonassar . . . . .	2578
From the Christian era . . . . .	1829

The 5589th year of the Jews began on the 9th of September, 1828,  
and ends on the 27th of September, 1829.

The 1244th year of the Turks began on the 14th of July, 1828, and  
ends on the 2d of July, 1829.

### IV. THE JEWISH CALENDAR OF FASTS AND FESTIVALS\*.

1829.		
Jan.	5	1st of Sebat.
	19	15 . . . . . Festival.
Feb.	4	1st of Adar.
	17	14 . . . . . Little Purim.
March	6	1st of Veadar.
	18	13 . . . . . Fast of Esther.
	19	14 . . . . . Purim.
	20	15 . . . . . Little Purim.
Ap.	4	1st of Nisan . .
	18	15 . . . . . Passover.
	19	16 . . . . . Morrow of the Passover.
	24	21 . . . . . Seventh day of the Feast.
	25	22 . . . . . Passover ends.
May	4	1st of Jyar.
	21	18 . . . . . School Feast.
June	2	1st of Sivan.
	7	6 . . . . . Pentecost.
	8	7 . . . . . Second Feast of Pentecost.
July	2	1st of Thammuz.
	18	17 . . . . . Fast.
	31	1st of Ab.
August	8	9 . . . . . Fast. Destruction of the Temple.
	14	15 . . . . . Festival.
	30	1st of Elul.
Sept.	28	1st of Tisri . .
	29	2 . . . . . New Year, 5590.
	30	3 . . . . . Second Feast of New Year.
Oct.	7	10 . . . . . Fast of Gedaliah.
	12	15 . . . . . Fast of Expiation.
	13	16 . . . . . Feast of Tabernacles.
	18	21 . . . . . Second Feast.
	19	22 . . . . . Feast of Branches.
	20	23 . . . . . Feast of Tabernacles ends.
	28	1st of Marchesvan
Nov.	26	1st of Chisleu.
Dec.	20	25 . . . . . Dedication of the Temple.
	26	1st of Thebet.

\* The year 1829 is, in the Jewish Calendar, an embolismic or intercalary year, consisting of thirteen months.

# V. CALENDAR OF THE TURKS.

1829	Year of the Hegira 1244	
Jan. 7	1st of Regeb.	
19	13 . . . . .	Fortunate Days.
20	14 . . . . .	
21	15 . . . . .	
26	27 . . . . .	Day of Victory.
Feb. 6	1st of Shâbân	Exaltation of Mahomet.
18	13 . . . . .	Fortunate Days.
19	14 . . . . .	
20	15 . . . . .	
March 7	1st of Ramadhan	Barah's Night.
19	13 . . . . .	Month of Abstinence.
20	14 . . . . .	Fortunate Days.
21	15 . . . . .	
April 4	29 . . . . .	
6	1st of Shawall	Defeat of the Turks before Vienna.
7	2 . . . . .	Great Beiram.
8	3 . . . . .	
18	13 . . . . .	
19	14 . . . . .	Fortunate Days.
20	15 . . . . .	
May 5	1st of Dhû'l kâdah	
17	13 . . . . .	Fortunate Days.
18	14 . . . . .	
19	15 . . . . .	
June 4	1st of Dhû'l hajjah	
13	10 . . . . .	Kurban Bairam.
16	13 . . . . .	Fortunate Days.
17	14 . . . . .	
18	15 . . . . .	
July 3	1st of Moharem	First Month of the Mussulman Year 1245.
12	10 . . . . .	Ashura.
15	13 . . . . .	Fortunate Days.
16	14 . . . . .	
17	15 . . . . .	
August 2	1st of Saphar.	
14	13 . . . . .	Fortunate Days.
15	14 . . . . .	
16	15 . . . . .	
31	1st of Rabiû I.	
Sept. 11	11 . . . . .	Birth of Mohamed.
12	13 . . . . .	Fortunate Days.
13	14 . . . . .	
14	15 . . . . .	
30	1st of Rabiû II.	
Oct. 12	13 . . . . .	Fortunate Days.
13	14 . . . . .	
14	15 . . . . .	
29	1st of Jomâdhî I.	
Nov. 10	13 . . . . .	Fortunate Days.
11	14 . . . . .	
12	15 . . . . .	
17	20 . . . . .	Taking of Constantinople.
28	1st of Jomâdhî II.	
Dec. 10	13 . . . . .	Fortunate Days.
11	14 . . . . .	
12	15 . . . . .	
27	1st of Regeb	

## VI. COMETS.

OBJECTS and phenomena, which are remote in their situations, apparently irregular in the time, or singular in the mode of their appearance, have, in the uninstructed ages of the world, been taken hold of by the cunning, and, being invested with superstitious and supernatural powers, have been made the means of enslaving the human mind. In this way, many pages of the volume of nature have been read as evil, long before the investigations of philosophy taught men to read them for good. Nor is it easy, even with all the enlightenment of modern times, to guard completely against abuses of this kind: wherever there is ignorance, there is sure to be credulity; and where credulity exists, there is always found some one ready enough to impose on it. Hence it becomes the duty of every one who is anxious, in matters of knowledge and action, to separate the wheat of belief from the chaff, to advert to, and, as far as is possible, to explain, those subjects upon which the popular or partially-informed mind is in greatest danger of being abused.

With respect to the several bodies that compose the material universe, and their several appearances and changes, be they ever so distant, ever so singular, or ever so contrary to the current of one's own past experience, there is a general philosophy of common sense, which if we could keep it constantly in mind, would remove, at once, all superstition, and change what have been objects of apprehension to the ignorant, into subjects of instruction and delight. That philosophy is this:—The universe, with every thing of which it is made up, from the smallest animalcule that the microscope can discover—haply not equal to the millionth part of a grain of sand,—to planets, and suns, and systems more extended and magnificent than the telescope, or even the imagination of man can reach, is the workmanship of One Almighty Artist, who sees all its parts, and its movements, infinitely better than any human being can discern the working of the simplest tool that he takes in his hand. The workmanship, too, is here perfect at once: the law of every body is not only implanted in itself, but is the constituent principle of its existence; and, therefore, every appearance which is put on by nature, throughout all its variety, depends upon a cause, as inscrutable in its origin, but as certain and uniform in its operation, as the alternation of day and night, or the succession of the seasons.

Of natural appearances there are few that have been regarded with more superstitious apprehensions than those bodies which occasionally appear in the sky, luminous like the stars, but generally distinguished from these by a tail, or train of fainter light, bearing some resemblance to a tuft or lock of hair. Of this the Latin name is *coma*, and in consequence these bodies are called comets, to distinguish them from the other luminaries, which, whether near or remote, apparently fixed or moveable, have not this train-like accompaniment.

Comets are one of the three classes into which astronomers divide those celestial bodies that adorn the sky during the night. The stars, which retain their relative positions with regard to each other, and are at so great distances from the earth, that no means or instruments hitherto invented can measure them, are one class,—and a class not apparently connected with our sun, or deriving light or heat from that luminary. The planets, which change their relative positions among the stars, and of which our earth is one, form the second class. They are solid bodies, and not luminous in themselves, but shine merely by reflecting the light of the sun. The masses of the planets, their magnitudes, and their motions, have been all determined with the greatest accuracy; and the place that any one of them will occupy at any proposed point of time can be calculated with the greatest ease, by any one acquainted with practical astronomy. The planets are, in their motions, governed by one uniform law. If the times in which any two of them revolve round the sun be expressed in the same unit—as in days or in hours; and if their mean distances from the sun be also expressed in the same unit—as in miles; then, if the numbers expressing the times be each multiplied once by itself, and those expressing the distances be each multiplied twice by itself, the two products relating to each planet have always the same proportion. This is the grand law of planetary motion; and it is proved by the most careful, and, therefore, the most satisfactory observations, through a period of time that leaves not the least room for mistake or error. Indeed, the theory of this part of astronomy has been found to agree so well with the facts, that, as it is one of the most splendid, so it is one of the most perfect departments of science. The improvements of telescopes, and the watchfulness of observers, have added to the list of the planets a few small ones, which are not visible to the naked eye; but from the time (about the beginning of the seventeenth century) that Kepler\* deduced the law of the planetary motions from the observations made on the planet Mars, that law has remained unshaken and undoubted.

We mentioned (in last year's Companion, p. 22,) that, in the early ages, the planets were held to have certain influences upon individuals and nations. The comets, which are more singular in their form, and more varied in the times of their appearance, were still better adapted for superstitious purposes; and accordingly we find that their visits have been attempted to be connected with the great, more especially the calamitous, events of nations. They were favourite themes with the poets; and they are thus introduced by Shakspeare, in the lamentation which the Duke of Bedford makes over the bier of Henry V.

“Comets, importing change of times and states,  
Brandish your crystal tresses in the sky;  
And with them scourge the bad revolting stars,  
That have consented unto Henry's death.”

Milton, too, though he lived after the days of Galileo and Kepler;

\* Those who wish to appreciate the great and successful labours of that illustrious man, may consult Dr. Robert Small's work on Kepler's discoveries, published in 1904.

though he was imbued with all the learning and philosophy of his time; and though he shows that he was well acquainted with the labours of those philosophers, does not scruple to call in the aid of the malign power of comets, in order to heighten his picture of Satan when preparing for combat.

“ On the other side,  
Incensed with indignation, Satan stood,  
Unterrified, and like a Comet burned,  
That fires the length of Ophiuchus huge  
I' the Arctic sky, and from its horrid hair  
Shakes pestilence and war.”

When such a man alludes to the subject, even for the purpose of illustration, it may well be supposed that the visits of comets were regarded with great apprehensions by the illiterate and the unphilosophical.

The appearance of a comet is, however, no more a prodigy, and has no more influence upon the fate of men or of nations, than the appearance of the moon, or of a leaf upon a deciduous tree in spring. Indeed it has not nearly so much; for the moon, by causing tides, affects the atmosphere and the weather, and must thence, to some extent or other, affect the human body; and the leaf is an indication of the season: but the comets are so distant, and either their motions are so rapid, or their substance is so rare, that none of them have been found to have any material action upon such of the planets as they have come near, although the planets have had a considerable influence upon them.

What the comets are, or what purposes they serve in the economy of creation, we do not know; and they are subjects upon which conjecture would be quite useless. As far as observation has gone—and beyond that one word need not be said—they are subject to the same laws as the planets, revolving about the sun in orbits or paths, with this difference, that they are much more eccentric, or differ much more from circles than the orbits of the planets; and thus, while they approach much nearer to the sun, at one time of their revolutions, they recede correspondingly farther from it at another. The time since men had rational opinions on the subject has, however, been too short for verifying, by observation, the theory as applicable to the whole, or even the greater number of these bodies that have from time to time made their appearance.

Tycho Brahe, who was an astronomer of Nature's own making, who could not be driven from the pursuit of it by all the influence of his guardian and preceptor, and to whose twenty-one years of close and regular observation at Uranibourg, in the little Danish isle of Huena, the science is more indebted than to the observations of any other individual, was the first who expressed a decidedly rational opinion on the subject of comets. Finding, by careful observation, that the comet of 1577 had no diurnal parallax, which he could detect,—that is, that its place when viewed from the surface of the earth, was not different from what it would have been if viewed from the centre,—he properly concluded that its distance from the earth must be greater than that of the moon, in which this parallax was apparent to him. This was one step; and it

was an important one: it removed comets to such a distance from the earth, that their use could not well be supposed to be for it, or their influence upon it very great.

Kepler, a pupil every way worthy of his illustrious master Brahe, turned the observations on this comet to account in determining (or, at all events, guessing at) the motions and paths of comets, just as he did the observations of the planets to the determining of the laws of their motions. His first conjecture was, that the comets moved in straight lines; but as that did not agree with the observations, he again concluded that they were parabolic curves, having the sun near the vertex, and running indefinitely into the regions of space at both extremities. Though sixteen comets had been mentioned in history previous to the time (about 1636) when Kepler attempted to determine the form of their paths, there was nothing to fix their identity, so as to lead him to conclude that any one was the re-appearance of a former; and thus there was nothing to suggest to him the necessity of a comet's moving in an orbit, so as to return and re-appear at a future period. To do that was reserved for one of the most industrious as well as sagacious of astronomers, Dr. Halley, the contemporary and friend of Newton. The discovery of the law of gravitation by the latter, its being a confirmation of the doctrine of Kepler, and its being found constant and universal, in every situation, whether on the earth or in the solar system, in which it could be traced, gave to the physical sciences generally, and to that of astronomy in particular, a generalization and harmony which had not previously been known. The general law of the motion of bodies in free space, as well as his own particular observations on the comet of 1680, led Newton to conclude that the orbits of the comets must, like those of the planets, be ellipses, having the sun in one focus, but far more eccentric, and having their *aphelions*, or greatest distances from the sun, far remote in the regions of space.

The idea, thus thrown out by Newton, was taken up by Dr. Halley, who collated the observations which had been made of all the twenty-four comets, of which notice had been taken previous to 1680. The results were abundantly curious: with but few exceptions they had passed within less than the earth's shortest distance from the sun; some of them within less than one-third of it; and the average about one half. Out of the number, too, nearly two-thirds had had their motions retrograde—or moved in the opposite way to the planets.

While Halley was engaged on these comparisons and deductions, the comet of 1682 made its appearance, and he set about observing it with great care, in order to determine the elements of its orbit. Having done so, he found that there was a wonderful resemblance between it and three other comets that he found recorded,—the comets of 1456, of 1531, and of 1607. The times of the appearance of these comets had been at very nearly regular intervals,—at least the differences had been only fractional parts of a year—the average period being between seventy-five and seventy-six years. Their distances from the sun, when in *perihelion*, or nearest to

that luminary, had been also nearly the same—being nearly six-tenths of that of the earth, and not varying more than one-sixtieth from each other. The inclination of their orbits to that of the earth had also been nearly the same, between  $17^{\circ}$  and  $18^{\circ}$ ; and their motions had all been retrograde. Putting them together, Dr. Halley concluded, that the comets of 1456, 1531, 1607, and 1682, were reappearances of one and the same comet, which revolved in an elliptic orbit round the sun, performing its circuit in a period varying from a little more than 76 years, to a little less than 75,—or having, as far as the observations had been carried, a variation of about fifteen months in the absolute duration of its year, as measured in turns of that of the earth. For this variation in the time of its revolution Dr. Halley accounted, upon the supposition that the form of its orbit had been altered by the attraction of the remote planets, Jupiter and Saturn, as it passed near to them; and thence he concluded, that the period of its next appearance would be lengthened, but that it would certainly reappear in 1757, or 1758. Its doing so was, of course, the fact that was to be decisive of the orbits of comets, and that they were regular and permanent bodies, obeying the general laws of matter.

Halley did not live to see the verification of his prediction: he died in the year 1742, at the advanced age of eighty-four. Soon after his death, Clairault, D'Alembert, and Euler, three of the most eminent mathematicians of Europe, set about the solution of what is called "the problem of the three bodies," that is, to determine the paths described by three bodies, projected from three given points, in given directions, and with given velocities, their gravitating forces being directly as their quantities of matter, and inversely as the squares of their distances. The object of this problem is to find the disturbing effects that the bodies composing the solar system have upon each other; and it applies to comets, when within the limits of planetary action, as well as to the planets themselves. After some errors into which all the three had been led, and which gave a result that seemed to overturn the whole doctrine of gravitation, Clairault succeeded in obtaining an approximate solution, which agreed with and confirmed that theory. Having done so, he applied it to the calculation of the disturbing influence of Jupiter and Saturn, which Halley had predicted would retard the comet of 1682, in its re-appearance about 1758. The results of Clairault's calculations were, that the comet would be retarded 100 days by the attraction of Saturn, and 518 days by that of Jupiter, so that it would not come to the perihelion, or point of its orbit nearest the sun, till the 13th of April, 1759. Clairault, however, fixed certain limits, within which his calculations might probably be erroneous. It was eventually found that the difference between calculation and observation was less than that which he assigned.

Clairault read his investigations to the Academy of Sciences in November, 1758; and, in little more than a month afterwards, the comet made its appearance; and it reached its perihelion on the 13th of March, in the following year, being thirty days earlier than he had calculated. Subsequent calculations enabled him to reduce



the error to nineteen days; and, though the calculations of the disturbing forces were only approximations, enough had been done to prove the return, and determine the orbit of one comet, and give every reason for concluding that all comets, being bodies of the same class, are subject to the same general laws as the planets, and only vary from each other in the proportion and magnitude of their orbits. There was one further confirmation: Clairault had calculated that the *node* of the comet's orbit, or the point in which it cut the plane of the orbit of the earth, would advance  $2^{\circ} 33'$  in absolute space, or  $1^{\circ} 29'$  more than the equinoctial points, the precession of which, in the time of the comet's revolution, was  $1^{\circ} 4'$ ; and observation gave exactly the same result,—so that the only difficulty that remained in the doctrine of comets was in the estimation of the disturbances to which they are exposed from the other bodies of the system, more especially in the parts of their orbits most remote from the sun, where their motions are comparatively slow.

Along with the period of this comet, and its perihelion distance, the magnitude and form of its path were known. Estimating the mean distance of the earth from the sun at 95,000,000 miles, the mean distance of the comet is 1,705,250,000 miles; its greatest distance from the sun 3,355,400,000; its least distance 55,100,000; and the transverse, or largest diameter of its orbit, 3,410,500,000. Therefore, though its aphelion distance be great, its mean distance is less than that of Herschel; and, great as is the aphelion distance, it is but a very trifling fraction less than one five-thousandth part of that distance from the sun, nearer than which the very nearest of the fixed stars cannot be situated; and, as the determination of their distance is negative, and not positive,—a distance within which they cannot be, and not one at which they actually are, the nearest of them may be at twice or ten times that distance.

The comet of 1759 is, therefore, a body belonging to the solar system, and quite without the attraction of any body which does not belong to that system; and, as this is determined of one comet, analogy points it out as being the case with them all. Their appearances and disappearances have, therefore, no connexion with the affairs of men; but, like the planets, form part of the proper province of astronomical observation, the chief difference being that the study of them is more recent and difficult, and the knowledge, consequently, more imperfect.

Besides the comet of 1759, of which there have been four authenticated returns, and which may be expected again about 1833, there are two others, of which something like a return has been traced at long intervals. One of these passed its perihelion at about eight on the morning of the 6th of July, 1264, reckoning mean time at Greenwich; and again, at a little past eight on the evening of the 21st of April, 1556. Thus its period is about 292 years, and it may be expected in 1848. The perihelion distance, however, of this comet, which was more than half that of the earth in 1264, had diminished an eighth part by 1556; and, as this must have caused a

great elongation of its orbit, and as, from the length of its period, it must go far into the regions of space, there is no knowing how both the time of its revolution, and the form and position of its orbit, may have been altered.

The other comet, in the elements of whose orbit there is a similarity, from which its identity might be with probability inferred, appeared in 1532, and again in 1661, having, thus, a period of about 129 years. The return of that comet should, therefore, have been about 1790. In that year, three comets made their appearance; but neither of them resembled the one of 1661. Two of them moved in the opposite direction; and the remaining one was more than twice the distance from the sun in its perihelion, and its orbit at nearly double the angle with that of the earth.

The comet, denominated Encke's comet, which is now engrossing the public mind generally, and the scientific world in particular, has justly claimed and received the careful attention of astronomers, since its appearance in 1818 engaged Professor Encke to consider the elements of its orbit. He was enabled to identify it with a comet described by Messrs. Mechain and Messier in 1786, in the constellation Aquarius; also with a comet discovered in 1795 by Miss Herschel in the constellation Cygnus; and with the comet in 1805. The investigation of the diligent professor enabled him to foretel its reappearance in 1822, and to state the probability of its not being observable in our climate. This anticipation was realized by the fortunate circumstance of the attachment to astronomical pursuits of Sir Thomas Brisbane, who was then governor of New South Wales, and had fitted up an observatory there, and provided himself with the able assistance of Mr. Rumker. The latter gentleman appears to have discovered the comet on June 2, 1822; and his accurate observations afforded Encke the means of reconsidering the true elements of its orbit, and with additional confidence to compute its return for 1825. This occurred as was expected; the fresh data afforded by that return were carefully collated by the professor, to enable him still more satisfactorily to define the orbit, and with increased confidence to predict its return this year. It was first observed by Mr. South on October 30, 1828. This comet affords particular interest to the mind of the astronomer, though it does not offer a splendid object to his eye. Its orbit is an ellipse of comparatively small dimensions, wholly within the orbit of Jupiter; its period is about three years and three-tenths,—a much shorter period than has hitherto appeared to comprise the revolution of any other comet, with the exception of one seen in 1770, which did not satisfy, as far as observation has been able to shew, the prediction of the period of five years and a half which was attributed to it. In the opinion of Encke and other astronomers, the comet which is now visible may afford an opportunity of proving that the heavens oppose a resisting medium to the motion of bodies. This subject has been discussed in the Transactions of the Astronomical Society of London, by the able mathematician Massotti; and that gentleman offers strong reasons for considering comets capable of affording a demonstration of a

resisting medium in the heavens, though planets may give no indication of it. Another comet which encourages the anticipation of much astronomical gratification, is one which Biela discovered February 27, 1826, and which was afterwards seen by Gambart and others. It seems to possess similar claims to the attention of astronomers as that of Encke, it being conceived to revolve about the sun in about six years seven-tenths, and to be the same as the comet which appeared in 1772 and that which appeared in 1806. Encke's comet will be in its perihelion, by computation, on 10th January, 1829.

The comet of 1770, to which allusion has been made, would lead us to conclude that we are still ignorant of many of the causes by which the form of the orbits of comets, and the times of their revolution and return, may be disturbed. That comet moved almost in the plane of the earth's orbit, having an inclination of only about a degree and a half: it had been observed with great care; and the result of the observations was, that it should return about every five years and a half. Instead of going out of the system, as may be presumed to be the case with those comets that have long periods and eccentric orbits, its greatest distance could not be much greater than that of Jupiter, while its mean distance from the sun was not much more than three times the perihelion distance of the earth. No comet, at all answering to that one, has, however, been again discovered; and therefore the conclusion is, that there are within the system itself causes which can completely alter the motions of these bodies; but what those causes are, other than the attraction of the planets, has not yet been ascertained.

One remarkable difference between the comets and the planets is in the angles which their orbits make with that of the earth. Leaving out the small planets that have recently been discovered, all the others are contained within a zone extending only  $7^{\circ}$  on each side of the earth's orbit; and, with the exception of Mercury (by far the smallest of the *old* planets), they are within half that space. But the orbits of the comets are at all possible angles; and the number increases with the angle, so that they approximate to an equal distribution, in all directions, round the sun as a centre. The numbers that have been observed are as follow:—Under  $10^{\circ}$  of inclination, 8; under  $20^{\circ}$ , 19; under  $30^{\circ}$ , 26; under  $40^{\circ}$ , 37; under  $50^{\circ}$ , 47; under  $60^{\circ}$ , 63; under  $70^{\circ}$ , 79; under  $80^{\circ}$ , 88; and under  $90^{\circ}$ , about 100. Thus, by far the greater number of the comets have their paths out of the direction of those of the planets; and hence, though they be bodies of such consistency as that their collision with the planets would produce serious consequences, there is but little chance that such collision can take place. The comets that have been observed have made their passages through very different parts of the solar system:—24 have passed within the orbit of Mercury; 47 within that of Venus; 58 within that of the Earth; 73 within that of Mars; and the whole within that of Jupiter. Of the hundred, or thereabouts, that have appeared, about one half have moved from west to east in the same direction as the planets, and the other half in the opposite direction. The

direct and retrograde ones do not appear to follow each other according to any law that has been discovered. From 1299 to 1532, all that are mentioned were retrograde; and five that were observed from 1771 to 1780 were all direct.

Being quite ignorant both of the size of the comets, and their quantities of matter, we can form no conclusions as to their effects, even upon the positions of the planets. Hitherto, their influence, if anything, has been very small; for, within the limits that must be allowed for error, even in the best tables that are calculated upon an approximation, the whole of the irregularities are explainable upon the hypothesis of planetary disturbance alone; and the system appears to have gone on just as if there had been no comets in it. That the comets are formed of matter of some sort or other we know, from the dense and opaque appearance of their nucleus, as well as from the action of the planets upon them; but, as their action upon the planets has not been great, or even almost perceptible, we are led to the conclusion that they are not bodies of the same density or magnitude as even the smallest and rarest of the planets. When a comet is viewed through a telescope of considerable power, there appears a dense nucleus in the centre of the luminous and apparently vaporous matter, of which the external parts are composed; and the opacity of this nucleus varies in different comets. On its first appearance, and again when it recedes, the luminous part of the comet is faint, and does not extend far from the nucleus; but, as it moves on towards the perihelion, the brightness increases, and the luminous matter lengthens into a train, which, in some cases, has extended across a fourth of the entire circumference of the heavens. But, though the general fact of the increased brightness of comets, and length of their tails, with their approach to the sun, and the consequent inclination of their motion, has been established, the observations have not been uniform or minute enough for proving what proportion the increase of brightness bears to the increase of the velocity, and the diminution of the distance from the sun. No doubt all the comets of which there are well-authenticated accounts, of great brightness and length of tail, have passed near the sun in their perihelion. Thus the comet of 1769, which was not a fifth of the earth's perihelion distance from the sun, had a tail of  $60^{\circ}$  in length, as seen at Paris; while that of 1759, which was more than half the earth's perihelion distance distant, had a train of only  $2^{\circ}$  or  $3^{\circ}$ . The length of the tail varies, however, not only with the time at which it is observed, but with the place of observation:—a difference probably depending on the difference of clearness and purity in the air. The tail of the comet of 1759 was  $25^{\circ}$  long, as measured at Montpellier, in the south of France, and considerably more than that, as measured at the Isle of Bourbon, in the Indian Ocean. That of 1769 was  $60^{\circ}$  at Paris,  $70^{\circ}$  at Boulogne,  $90^{\circ}$  between Teneriffe and Cadiz, and  $97^{\circ}$  at Bourbon. Generally speaking, they appear to be brighter and larger when seen at sea than on land, and in the warmer regions more than in those nearer the Poles.

When the superstitious fear of comets, as portending harm to the inhabitants of the earth, had vanished before the light of philosophy, that light was in some danger of giving rise to fear of another sort,—fear of physical harm to the earth itself, by the collision of some comet that might cross its path. We have no evidence, however, that such a collision ever did happen, either with the earth or with any other planet ; and we have not absolutely correct means of so calculating the place of a comet as to be able to say with certainty that, on a given day, during a given month, or even during a given year, it shall cross the orbit of a planet. The motion of the earth in its orbit is, in round numbers, more than a million and half of miles in a day ; and as Clairault, with all his care, did not come nearer the truth than nineteen days, though the collision of a comet and the earth should be calculated from any known data, the earth might, in fact, be, at the time, far enough from the comet.

Indeed, though the fact of the return of two comets be established, namely, Halley's and Encke's, and the return of every one, if not affected by physical causes that lie beyond the limits of our present knowledge, has been rendered exceedingly probable ; yet we can observe them for so short a portion of their courses, and these seem so very apt to be altered, that we ought not to speak of them with anything like the certainty with which we speak of the planets. As far as we have been able to examine them, they appear to obey the same laws as the other distinct masses that make up the known part of the system of the universe. Beyond this we know nothing of their nature ; and as for their effects, moral or physical, we need give ourselves no trouble about them, for there is not a trace of the existence of such effects, upon any authentic record.

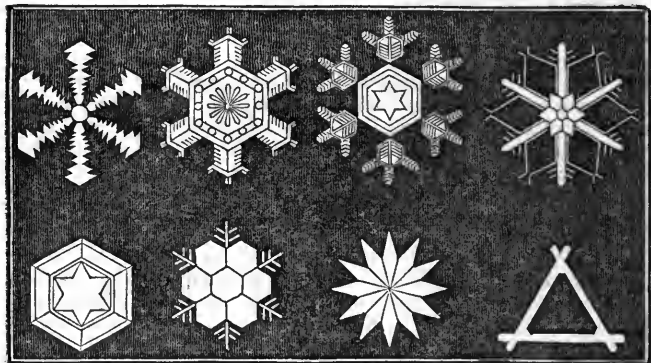
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## VII. OBSERVATIONS OF A NATURALIST.

## JANUARY.

"Never resting Time leads Summer on  
To hideous Winter, and confounds him there,  
Sap-checked with frost, and lusty leaves quite gone,  
Beauty o'er-snow'd and barren."—*Shakspeare*.

*Snow and Hoar-frost*.—There cannot be finer subjects for the microscope, than the crystals of water of which snow and hoar-frost are composed; and if beauty, as has been maintained, consist in regularity amidst variety, snow-flakes, seen by the aid of the microscope, must be considered highly beautiful. Their variety is endless, but the principal forms are stars of lamellar, spicular, or pyramidal crystals, from one-third to one thirty-fifth of an inch in diameter. The following engraving represents a few of these forms, selected from ninety-six varieties, figured by the Rev. Mr. Scoresby, in his "Account of the Arctic Regions."



*Plants*.—In defiance of the cold, several of our native plants put forth blossoms, though they rarely, if ever, at this season, perfect their seeds. Among these we may mention groundsel (*Senecio vulgaris*), chickweed (*Alsine media*), the barren strawberry (*Fragaria sterilis*), red dead nettle (*Lamium purpureum*), and furze (*Ulex Europæus*). It is highly probable, we think, that these and other flowers which brave severe cold, have the power of generating organic heat; for many of them are so delicate in texture, that no plausible supposition could be made respecting the rigidity of their fibres, or their sap-vessels. Some plants indeed manifest a degree of heat enough to affect the thermometer, and all vegetables are some degrees warmer than the surrounding air; a circumstance which enables them to resist the colds of winter. The same fact holds true of seeds which have been self-sown the preceding summer and autumn, and remain through the winter on, or near the surface of the ground, retaining

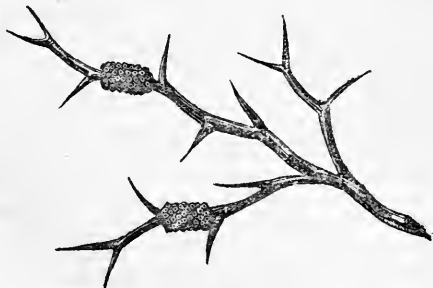
their life in defiance of frost, till the reviving warmth of spring invites them to germinate.

There is a remarkable fact mentioned by M. de la Roque, with respect to the cedars of Lebanon, which, on their native mountains, as soon as the winter snows begin to fall, change their irregular diffusion of branches into a regular uniform pyramidal cone; but as the snows melt with the return of spring, they again spread out their boughs.

The check given to the flow of sap and increase of growth in trees by the winter's cold, is the cause of those circles which appear on cutting a tree across, and by which its age may be counted. That cold is the chief cause of this, appears from the circles being more broad and distinct on the northern side of the tree.

*Insects.*—Several species of gnats (*Culices* and *Tipulidæ*) are almost the only winged insects which venture to sport in the winter's sun. A few moths also make their appearance, such as the early and winter moths (*Geometra primaria* and *G. brumaria*), the bay-shouldered button-moth (*Tortrix spadiceana*). One of the most remarkable circumstances, however, regarding insects, is the subsistence of the autumnal brood of caterpillars upon a very scanty supply of food, and sometimes without any. In gardens, for example, the speckled-and-spotted caterpillar of the magpie moth (*Geometra grossulariata*) may be found upon currant and gooseberry bushes, of which the more expanded buds only can afford them food; and yet they usually survive the hardest winters, though not advanced beyond their first or second skin, and not so thick as a crow-quill.

Like the seeds of plants, just mentioned, the eggs of many species of insects are deposited in the autumn, survive the winter, and are hatched in spring—the living principle, though not in a state of activity, being capable, as it would appear, of withstanding severe cold. As an example of this, we may mention the eggs of the lacquey moth (*Lasiocampa neustria*), which are laid in a sort of spiral round the twig of a tree, and fastened with a strong cement, as may be seen in the figure.



The chrysalides or pupæ of various sorts of moths and butter-

flies also remain through the winter, but are usually shielded by a web or crust, some above, and some under ground.

*Fishes.*—It is the opinion of two celebrated French ichthyologists, MM. Bloch and Lacepede, that the mackarel, and some other gregarious fishes, do not, as is commonly believed, migrate from their respective seas, but merely quit the vicinity of the shores at the approach of winter, and lie amongst the mud, at the bottom of deep water, till revived by the warmth of the ensuing spring.

*Birds.*—One of our smallest and prettiest birds, the golden-crested wren (*Sylvia regulus*), is most easily discovered at this season, flitting from branch to branch among the hedges which enclose plantations of the silver fir. It is said to be so affected with fear, that when the branch where it is sitting is beat smartly with a stick, it drops down dead, though it will allow you to approach within a few feet of it without being alarmed.

Some gardeners, who know no better, accuse many birds of destroying the buds of their trees at this season, because they are seen continually nibbling about them. The truth is, however, that it is not the buds, but the insects frequenting them, of which the birds are in search. In the same way some birds search under the decayed bark of trees, amongst the straws of a thatched barn, or the moss on trees, for their favourite food.

*Quadrupeds.*—The common bat, or flitter-mouse (*Vespertilio murinus*) begins to flit about on fine evenings, though the crepuscular moths, which are its favourite prey, are still scarce; and it must often, we should suppose, hawk for a whole evening without taking one. Bats, however, have been caught, which did not refuse any sort of insect, grubs not excepted; and perhaps those bats which appear so early as January, have other prey besides moths to pursue.

By following out these and similar observations on the phenomena of plants, and the habits of animals, the Naturalist may,

“ With some delight the day outwear,  
Although the coldest of the year.”—*Ben Jonson.*

## FEBRUARY.

“ ——— Awake, arise,  
And hail the Sun's returning force;  
Even now he climbs the northern skies,  
And health and hope attend his course.”—*Akenside.*

*Thaws.*—The disappearance of frost, and the melting of the snows, accompanied with copious rains, are intended by nature to loosen the soil for the expansion of the roots of plants, and at the same time to supply the fluids which are to form the sap. Where chalk, limestone, or marble abounds either in rock masses, or diffused through the soil in form of sand or gravel, the thaws of this season tend to disintegrate the more compact portions, and



set free their carbonic acid, which being washed down to the roots of plants by rain, constitutes an important portion of their nutriment, or at least serves as a stimulant to excite the absorbent orifices of the fibrillæ to imbibe nutritive juices.

*Plants.*—The approach of spring is announced by the blowing of the snow-drop (*Galanthus nivalis*).

“The first pale blossom of the unripened year;  
As Flora’s breath, by some transforming power,  
Had changed an icicle into a flower.”—*Darwin*.

This is accompanied by the golden flowers of the crocus, the red hepatica, and the pale primrose, with its innumerable darker varieties called polyanthus, the pride of the spring flower-border. Were it not that the groundsel, the chickweed, the wall speedwell (*Veronica arvensis*), and a few other plants now in flower, have small fibrous roots, which seem not to be very well adapted for withstanding the cold, we might have very fairly inferred that the compact coatings of the bulbous roots of the crocus and snow-drop, aided by their glutinous juices, were the principal cause of their early flowering.

Mosses are now in their fullest verdure, and many of them advanced to fructification, being destined, it would appear, to keep up the green tints of nature when all other vegetation is dead or slumbering, and to protect the roots of larger plants from vicissitudes of cold as well as of heat, and from too much moisture, as well as too great dryness. Marsh and water mosses have a tendency to produce soil, and to convert morasses into solid land; while they effect the purification of the water in which they grow, by absorbing the putrescent substances with which it may be corrupted, and by exhaling oxygen in exchange. With the exception of *Polytrichum commune*, *Bryum ligulatum*, and *Hypnum dendroides*, and *H. alopecurum*, few mosses send roots into the soil beyond a few lines, and cannot therefore impoverish it so much as has been supposed. Mosses indeed seem, like the air-plant of India, to derive their chief nourishment from moist air—a circumstance which may account for their growing on trees, walls, and bare rocks, where there is little if any soil to support vegetation.

*Insects.*—The most conspicuous of the early insects is the industrious bee, indefatigable in searching for the scanty blossoms which give promise of honey, particularly the catkins of the willow, time out of mind the resort of bees.

“—— Sepes  
Hyblæis apibus florem depasta salicti.”—*Virgil, Bucol. I.*

“The quick-set sallows here  
Are fraught with flowers, suck’d by Hyblæan bees.”—*Trapp*.

It is interesting to remark, that how far soever bees may wander from their hives (and a mile or two is not uncommon), they always find their way home. According to the poetical creed, this is done *memoriter*, by the insect retracing all its wanderings; a doctrine which Rogers, in his “Pleasures of Memory,” has beautifully illustrated:—

"Who guides the patient pilgrim to her cell?  
 Who bids her soul with conscious triumph swell?  
 With conscious truth retrace the mazy clue,  
 Of varied sweets which charmed her as she flew?  
 Hail, Memory, hail! thy universal reign  
 Guards the least link of Being's glorious chain."—Part I.

Instead, however, of this tedious process of retracing their way by means of memory, bees uniformly fly from great distances directly to the hive as straight as a ball from a musket, and with extreme rapidity. But in departing from the hive upon an excursion, they, for the most part, begin by examining the flowers in their immediate neighbourhood. Bees indeed seem to possess so very little of the power of memory, that an individual may be seen to search the same blossom two or three times in the course of a few minutes, in utter forgetfulness of having already plundered it of its honey.

*Birds.*—In anticipation of the coming fine weather, several species of birds now begin their songs, among which may be remarked the wren (*Sylvia troglodytes*), the Hedge-sparrow (*Acceptor modularis*), and the Thrush (*Turdus musicus*). Those who have attended minutely to the singing of birds may have remarked, that a provincial accent can be distinguished among the birds of different counties; and hence it is that the chaffinches of Essex are so much more valued than others. The same difference has been remarked in individual birds, which could be readily recognised both by their voice, and the character of their notes. Wilson, the distinguished American ornithologist, well remarks, that birds differ as widely as men in tone, energy, and expression. "There was one wood-thrush" (*Turdus melodus*), he adds, "with whose notes I was so familiar, that I could recognise him the moment I entered the woods. He serenaded the forest with notes as clear as those of the nightingale."

*Quadrupeds.*—The mole begins to be busy in working his subterraneous galleries in pursuit of earth-worms, from which, before he eats them, he ingeniously strips off their skins, by making an opening, and through this squeezing out the contents of the body. The earth-worm, it may be remarked, is so instinctively afraid of the mole, that any motion of the earth similar to that produced by the burrowing of the mole, causes it to make all haste above ground—a circumstance well known to fishers, who procure the earth-worms for bait, by moving a spade or a stake to and fro in the ground.

Sheep, about the end of the month, begin to drop their lambs, and are very careful, it is said, in selecting a sheltered spot for that purpose; particularly the hill sheep of the border counties, which are more exposed to the vicissitudes of the weather. In the warmer enclosures of the south, it is probable that this, from being less necessary, may not be observed.

## MARCH.

"— Just to say the Spring is come,  
The violet smiles from her woodland home."—*Clare*.

**Seed-time.**—The copious rains of February, with which the soil has in most seasons been drenched, though well adapted for making the roots of perennial plants send forth shoots, would be unfavourable if continued, for the germination of seeds, which require to be moist, but not soaked, in order to spring well. It is this which renders dry weather at this season so valuable, and which gave rise to the proverb, that "a bushel of March dust is worth a king's ransom." When wet weather continues during this month, seeds are apt to fail, by becoming mouldy or rotten; whereas, when they are got in dry, they are more certain to germinate vigorously. Self-sown seeds, for the same reason, seldom produce such fine plants as those reared from seeds which have been carefully dried and kept out of the ground during winter—a fact with which florists are well acquainted; as self-sown flowers soon lose all the beauties acquired by cultivation, and return to the character originally belonging to them in the wild state.

**Plants.**—The filbert and common hazel (*Corylus avellana*), which begin to show catkins as early as the preceding autumn, are now in full flower, the winds and the early bees shaking the pollen from them over the crimson female flowers, which may be seen peeping from the fruit-buds where the nuts are destined to grow. The method of rendering particular species of plants more fertile, which has been long practised in Egypt, Portugal, and other countries, has lately been successfully tried upon our cultivated nut trees, by gathering a bunch of catkins in the nearest copse, and dusting the orchard or garden plants with them, as soon as the female flowers expand. The willows, poplars, and other catkin-bearing trees, must take the chance of winds and insects for producing perfect seeds.

The mosses on walls are now overtopped and outvied by the pretty white blossoms of the *Draba verna*, and sometimes, though more rarely, by the wall-speedwell (*Veronica arvensis*); while the fields begin to be garnished with daisies, and the golden-yellow flowers of the little celandine (*Ranunculus ficaria*), to which Wordsworth has dedicated some pretty verses, wishing that he

" Could get some three or four  
But to love his little flower."

On warm walls and sheltered garden borders, the bright crimson flowers of the *Pyrus Japonica*, and the bright yellow blossoms of the *Corchorus Japonica*, are now conspicuous.

**Insects.**—Linnæus calls the small tortoise-shell butterfly (*Vanessa urticæ*), the deceptive herald of spring (*Fallax veris nuncius*), because there often appear, on fine days, individuals which have survived the winter; but a more conspicuous butterfly is the Brimstone (*Gonepteryx rhamni*), which, in some districts, is not rare at this early season, flitting about the woods like an animated primrose flower. The perfect state of the wings, which at this season are usually fresh and uninjured, might have con-

vinced authors that the Brimstone butterfly has not survived the winter, as is frequently asserted, but has just been evolved from its chrysalis. Several other species, however, chiefly of the genus *Vanessa*, do live through the winter, in the perfect state; but this, as far as general observation extends, can be affirmed only of the female.

*Birds.*—Before the arrival of the nightingale, or at least before he begins to sing, the owl, particularly, it is said, before rain, performs a nightly serenade—such as it is,—dreary, ominous, but not without poetical association, when we recollect the throne assigned her by Gray, in the ivy-mantled tower. But the truth is, that the owl only utters her cry while on the wing. It is a fact worthy of remark, in the natural history of the owl, that, like the cat, it is very fond of fish, though it seems but ill-adapted by nature for capturing them. That it does so, however, there can be no doubt, as owls have been detected in the very act of robbing fish-ponds, and they frequently feed their young with fish.

*Quadrupeds.*—The field-mouse now begins to peep out from its winter retreat, and to make preparations for its summer nest, in the driest and warmest ridge of a grass field, or hedge bank. Some species of field mice are very ingenious in the construction of their nests. Mr. White describes one suspended on the head of a thistle in a wheat field, composed of blades of wheat curiously plaited, perfectly round, and about the size of a cricket-ball. No opening could be discovered, and it was so compact and well-fitted, that it could be rolled along a table without being discomposed. It contained eight young ones, naked and blind, which so completely filled the nest, that there was no room left for the dam, and apparently, not even for their turning.

#### APRIL.

“I see around me the wide fields revive,  
With fruits and fertile promise; and the Spring  
Come forth, her work of gladness to contrive,  
With all her reckless birds upon the wing.”—*Childe Harold*.

*Plants.*—The Romans called this month April, from *aperire*, to open, because not only the spring-blossoms now expand to the returning sun, but the buds unfold to the fresh rains. The leaf-buds of trees are protected from the cold prevalent in the preceding months, both by being compactly folded and enveloped in a tough skin or membrane, and, in most cases, by a thick glutinous gum—difficult to freeze, and too adhesive to be washed off by rains. The only efficient solvent of the leaf-bud gum is the re-ascending sap, which dilutes it and renders it yielding, like the acid applied to its envelope by the puss-moth (*Cerura vinula*) when it escapes from its pupa. Every bud, it is worthy of remark, is supposed, by high botanical authority, to constitute an individual plant, and a tree is consequently a compound or rather aggregate of these. The gardener's art of striking from cuttings, and still more the practice of budding, tends strongly to confirm this doctrine.

As the sap is now rising rapidly in the stems of trees and perennial plants, it is a good season to make experiments upon its motion, and to verify or disprove the recent views of M. Dutrochet, who asserts that the motion of the sap is partly, if not altogether, the consequence of electric currents.

*Insects.*—The study of insects, or, at least, the *collecting* of butterflies, moths, and the more showy flies and beetles, is much on the increase. The great entomological harvest is, at this period of the year, just beginning; and the grassy banks, lanes, hedges, woods, and gardens will, in general, well reward the activity of the collector. The caterpillars of many of the Lepidoptera may be met with, particularly towards the end of the month, feeding on their favourite plants,—such as the caterpillar of *Melitæa Cinxia* on the plantain; that of *Melitæa Artemis* on the meadow scabious; and those of several *Lycænx* on grassy banks, where also may not rarely be found that of the drinker-moth, *Odonestis potatoaria*, finely marked with dark-brown and snow-white. We cannot spare room to enumerate one-hundredth part of the insects which an active collector may now procure; but we may mention that it is a good time to beat the hedges and bushes into a net, or sheet, or what is more portable—an umbrella.

*Birds.*—With the swallow, the cuckoo, and other birds of passage, whose return is universally observed, we have to record the arrival of our finest songster, the nightingale—"the sweet minstrel of the wood,"—"most musical—most melancholy," as Milton has it, though other poets of some note, from Chaucer to Coleridge, call it "the merry nightingale."

The nests of birds are now worthy the attention of all who study the varied operations of what has been termed instinct,—it being one of the most inexplicable facts, that birds of the same species build their nests alike, or nearly so, though, considering the age when they quit their paternal nest, they cannot be supposed, for a moment, to have learned how to build for themselves on the year following. The most ingenious nests are those which are covered-in above, with an entrance in the side, as those of the magpie, the wren, and the long-tailed titmouse (*Parus caudatus*). The gold-crested wren (*Sylvia regulus*) does not, as has been asserted, build its nest in this domed manner; but the willow wren does, upon the grassy or mossy bank which she selects for her domicile.

#### MAY.

"Now the bright morning star, day's harbinger,  
Comes dancing from the east, and leads with her  
The flowery May, who from her green lap throws  
The yellow cowslip and the pale primrose."—Milton.

*Plants.*—The economy of Providence in distributing seeds may now be remarked in those of the dandelion (*Leontodon taraxacum*), which are everywhere to be seen floating about in the air, supported by their feathery down. It is not to be supposed that half of these ever fall upon spots favourable to germination; but when so great a number of them and of their congeners of the class

*Syngenesia* are scattered about by the winds, it almost raises the chance to certainty that some of them will fall in spots where before there has been none, or only a scanty vegetation: on the tops of walls, for instance, where a thin stratum of soil has been formed by the decay of the winter crop of mosses. The process of the formation of such soil is exceedingly interesting, and may be observed, on a small scale, even in cities, on brick or stone walls. First, there is the green incrustation, called *Byssus*, by Linnæus, but recently proved to be the primary germination of several species of mosses, such as *Polytricha* and *Tortulæ*. When this decays, a very thin layer of vegetable earth is formed, which affords a scanty support for the roots of the next year's crop of mosses; and in process of time, soil is formed of sufficient depth for *Draba verna*, and other wall plants.

*Insects*.—Those who are attracted by the more interesting parts of entomology may spend many an amusing hour in studying the habits of the more ingenious insects (if we may use the epithet). The various species of ants, for example, are now busily repairing the damages which the severities of winter have produced upon their domiciles. It is surprising to observe with what expedition they construct their streets and covert-ways. An observer of insects, upon removing a box in his garden, in which he had sown some early annuals, found a large colony of the brown mason ants, which commonly shelter themselves under stones or amidst grass. The box being removed in the morning, they were left exposed to the light and heat of a bright sun, which is little less offensive to them than rain or frost. The colony was too large to make an immediate retreat to a place of shelter; which, besides, it would have required some time to discover and make known by their slow method of communicating intelligence. They had no alternative, therefore, but to enlarge the galleries which they had already constructed as part of their village under the box. Impelled by the strong stimulus of necessity, therefore, and being goaded by the sun's rays, they completed their excavations, and by noon had piled up a mass of earth, which at the same time increased their interior galleries and added to their protection above. At this time, scarcely a straggler was to be seen, where, a short time before, hundreds were digging and piling.

*Fish*.—The migration of fish, which occurs at particular seasons, according to difference of species, may, during the present month, be remarked in the case of eels in streams where they abound; but as it usually takes place in the night it seldom attracts attention. In cloudy weather, however, they often continue to *run*, as it is termed, during the morning. One of these runs was observed to be attended with the following circumstances: The river was embrowned at the time, in consequence of a recent fall of rain, which may have partly induced them to continue running after sunrise. Their line of march was about a foot or more from the edge of the bank, with which they kept nearly parallel, and their column might be about six inches broad.—

The eels themselves were all of one size, about as thick as a crow-quill, and about three inches long. They kept so closely together that there might be some hundreds in a foot's length of the column. What was no less singular, the column itself appeared in its whole extent to be of uniform breadth, as if it had been regulated by the parallel lines of a mathematician. The length of this column must have been considerable, as it was traced for more than half a mile; and during several hours the run continued undiminished, and proceeded at a velocity of half a mile or more in the hour. The whole column must have consisted of many millions of eels.

## JUNE.

"——— Came jolly June, arrayed  
All in green leaves, as he a player were."—*Spenser*.

*Plants*.—Violets are now out of flower, but they continue, by a most singular anomaly, to produce perfect seeds, now, and during the whole summer. This is the case with the *Viola odorata*, *Viola lutea*, and with most of the perennial species. We have mentioned the means which Nature takes to distribute the seeds of syngenesious plants; the mechanism by which the seeds of violets are distributed is no less interesting. They are enclosed in a capsule, composed of three valves and one loculament which, upon becoming ripe, opens and discloses the seeds attached in rows along the valves. Each of the valves, which is composed of a strong membranaceous substance, then contracts upon the seeds, and these being very smooth and oval-shaped, the sharp edges of the valve sliding down over the slope, throws them to a considerable distance. The seed-vessels, also, which previous to the opening hang down, become erect, and being thus more elevated, give a greater range to the projected seeds, which are usually thrown to the distance of several feet.

*Insects*.—Among the more interesting operations of insects, may now, and during the next month, be observed the mechanical art of the solitary bees,—the mason, which forms a nest of plaster on a wall; the carpenter, which augers a hole in wood; and the leaf-cutter, which lines its nest with a rose-leaf. But still more surprising is the operation of wasps, which literally make paper for their hives. For this purpose, they detach the fibres of wood by means of their jaws, from posts, rails, window-frames, &c.; and when they have amassed a bundle of fibres, they moisten the heap with a few drops of viscid glue from their mouths, and kneading it with their jaws into a sort of paste, or *papier mâché*, fly off with it to their nest. The wasps' paper is about the thickness of thin writing paper; and it requires from fifteen to sixteen sheets to complete the exterior covering of the nest.

*Birds*.—The swallows, as well as our other migratory birds, are now busy in the work of incubation, and the ingenious nests of one of the species, the *Hirundo rustica*, may now be seen in the corners of windows, and under the eaves of houses. A writer in "The Edinburgh New Philosophical Journal" has instructed swallow-

hatters how to get rid of them, by smearing the places where they build with soft-soap. Among our musical visitors, the sedge-bird (*Sylvia salicaria*) merits, we think, the name of the British mocking-bird, from being the only native wild bird which imitates the notes of others. It cannot, indeed, for a moment, be compared with the American mocking-bird (*Turdus polyglottus*), the very prince of feathered musicians; but our little bird hits off with great dexterity the twitter of the swallow, occasional passages of the sky-lark, and of his neighbour inhabitant of the marsh, the black-cap (*Sylvia atricapilla*), and particularly the chirp of the sparrow, and the guttural whirr of the white-throat (*Sylvia cinerea*.)

**Quadrupeds.**—In districts where moles abound, it may be remarked that some of the mole-hills are greatly larger than others. When a hill, of enlarged dimensions, is thus discovered, we may almost be certain of finding the nest, or den of the mole, near it, by digging to a sufficient depth. The fur of the mole is admirably adapted, from its softness, and short close texture, for defending the animal from subterraneous damp, which is always injurious, more or less, to non-amphibious animals; and in this climate, no choice of situation could entirely guard against it. It is a singular fact, that there are no moles in Ireland. May not the greater dampness of the climate account for their not thriving there?

#### JULY.

“ ————— It is a gloire to see;  
The stabled winds and the calmed sea,  
The soft season, the firmament serene,  
The lown, illuminate air and firth amœne,  
The cornys croppys, and the bloomed weeds,  
With gladsome garment revestinge the meads.”—Gawin Douglas.

**Plants.**—In dry, rocky, or calcareous places, in this month and the next, the rock-rose (*Cistus helianthemum*) is a very common flower, beautifying the patches of withered herbage with its golden blossoms, and giving an air of sunshine and gaiety to the barren rock. If you take a small probe, or a hog's bristle, and irritate any of the numerous stamens of this flower, you will see them fall back from the pistil, and spread themselves upon the petals, exhibiting a very pretty example of vegetable irritability,—little less striking than that of the sensitive plant. A similar instance of the spontaneous approach and retreat of the stamens may be seen in another elegant British plant—the grass of Parnassus (*Parnassia palustris*), which is not uncommon in moist meadows and upland marshes. When the anthers are young, they stretch forward till they reach the summit of the pistil, where they deposit the fertilizing pollen, and then fall back towards the petals.

**Insects.**—It is during this month that the caterpillars of most of the hawk moths are to be sought for. That of the puss (*Cerura vinula*) may be found on the lower branches of willow or poplar trees, and must be sought by the eye, for beating the branches will not make them quit their hold like the *Noctuæ* and *Geometræ*.



*Birds.*—About, or before this season, most song-birds become silent. The blackbird, the pippit-lark, the willow-wren, and several other birds, though they become silent at Midsummer, resume their notes in September; and the red-breast continues to sing all the winter. Pennant is of opinion that it is chiefly the birds which have been hatched in the preceding summer, which sing at this season.

### AUGUST.

“Crown’d with eares of corne, now come,  
And to the pipe sing harvest-home.”—*Dorset.*

*Drought.*—When dry weather, usual at this season, has continued long enough to evaporate the water of shallow ponds, the young geologist will find it interesting to examine the form of the cracks made in the sludge at the bottom, as illustrative of the forms of columnar rocks on the Wernerian principle. Colonel Imrie gives a very fine instance of this, in which the current of a stream of water had worn away the bank which had enclosed a pond. On the side thus broken down and laid open, the soil displayed a beautiful arrangement of columnar forms, about eighteen feet in length, and from one and a half to three feet in diameter. They were all angular, consisting of four, five, and six sides. They were perfectly vertical, and the whole surface upon which the water had stood was level, and cracked into polygonal forms, upon which Colonel Imrie stepped along as upon a Giant’s causeway. Similar phenomena are not rare, though seldom to be seen under such favourable circumstances for examination.

*Plants.*—In the pastures may now be observed patches and single stalks of grass, &c. in seed, *untouched by cattle*. This seems a wise provision of Nature for perfecting the seeds, and continuing the species; for, were cattle to browse on the grasses, &c. while in flower or in seed, as most of them are annuals, the succeeding crops would be much injured. We may illustrate the same fact by referring to plants used for salads, which also are annuals, and as soon as they shoot into flower, and, still more, when they form seed, are not relished. We do not mean to assert generally, indeed, that all plants are avoided by animals when in flower or seed; but when the remark is limited to annuals and biennials, it will hold almost universally. Not even snails and slugs, those indiscriminate devourers, will, in this case, touch a leaf.

*Insects.*—Flies begin to swarm into houses, in some places, in very troublesome numbers. Medically considered, swarms of house flies indicate unwholesome air, either from the vicinity of putrescent vegetable effluvia, or want of ventilation. They will accordingly be found most troublesome in the airless lanes, or narrow streets, of cities, and no less so in the localities of cottages or farm-houses, when these are in the vicinity of stable yards, dung-hills, compost heaps, hot-beds, &c.

Gnats, again, and other congeneric insects, indicate the neighbourhood of stagnant water and marsh land,—a miasmatic locality liable to low fevers, ague, and rheumatism.

*Birds.*—Swallows, and some other birds of passage, begin to congregate previous to undertaking their distant migratory expeditions. Their capability of performing flights much longer than there is any necessity for supposing, may be proved by numerous facts: Even a sparrow has been calculated to fly at the rate of not less than thirty miles per hour, and many experiments prove that the eider duck can fly ninety miles in the same time. The common kite (*Falco milvus*) has been observed to pass, without great exertion, over a space of a quarter of a league in a minute, and it could fly with ease from Cape Pruth to the Land's End, in a single day. M. Audubon, the distinguished ornithologist, has shot the passenger pigeon of America, and, on dissection, found its stomach full of fresh rice, which, to have resisted the digestive process, must have been swallowed *not many hours* preceding its death, but could not have been obtained within eight hundred miles of the place where it was killed. Though the nightingale, the willow-wren, and other birds of passage, fly with only half the swiftness, they may easily arrive in most parts of the South of Europe, or the North of Africa, in a few days.

*Quadrupeds.*—It is at this season that the burrel-fly (*Cestrus bovis*), as it has been called, lays its eggs upon horses; and it may be remarked that the most weakly or sickly horses are generally selected, as is the universal practice of parasitical animals, as well as parasitical plants.

#### SEPTEMBER.

"September marched eke on foot;  
Yet was he heavy laden with the spoyle  
Of harvest's riches."—*Spenser*.

*Fruits.*—Autumnal fruits are found to be more crude and indigestible than those of summer—the plum, for example, in its infinite varieties, as well as apples and pears (we mean in the raw state), than strawberries, gooseberries, or currants. One cause of the disagreement of the autumnal fruits with the stomach, and the greater digestibility of summer small fruit, may, perhaps, be traced to the state of the *constitution*. At the commencement of summer, the system is more nerved and braced by the atmosphere of winter and spring, and by the drier food which necessity obliges us to take at those seasons; so that the cooling fruits of summer are wholesome from their opening the bowels, and removing the oppression so commonly generated by the injurious habits of civilized life. But it is not wonderful, that a continuance of a watery and innutritious food like fruit, should, towards the autumn, produce debility in constitutions partly predisposed to it, by the continued and relaxing heats of the summer months.

*Plants.*—The colouring of leaves is now the most striking phenomenon in the vegetable world, and depends, it would appear, both on the different structure of the membranes in the several species, and on the different degree of oxygenation which has been produced on their constituent substances. The variety in the colours of the leaves of trees is no less remarkable than constant in

individual species. The leaves of the plane tree, for example, are tawny; of the hazel, yellow; of the oak, yellowish green; of the sycamore, obscure brown; of the maple, pale yellow; of the ash, fine lemon yellow; of the elm, orange; of the hawthorn, tawny yellow; of the cherry, red; of the hornbeam, bright yellow; of the willow, hoary. These are facts with which painters ought to be acquainted, and they are interesting to every lover of Nature.

*Insects.*—The harvest bug (*Acarus autumnalis*), in some districts, is now very troublesome and disagreeable, producing red, inflamed wheals, and intolerable itching. The best cure, it is said, for the bite, is the spirit of hartshorn; but the elder ointment offers the most speedy means of allaying the itching and pain. Tincture of camphor has also been recommended. The insect itself is so very small, as to be nearly imperceptible without the aid of the microscope.

One of our earliest is also one of our latest butterflies (*Gonepteryx rhamni*), whose appearance was mentioned above under March; the copper butterfly (*Lycaena Phleas*), the painted lady (*Vanessa cardui*), and the admirable (*V. Atalanta*), may still occasionally be met with.

The caterpillars of the death's-head-hawk (*Acherontia atropos*) are rather rare; but may occasionally be found feeding upon the potatoe at night, for they carefully conceal themselves by day under the lower leaves, and sometimes even under the mould. As they undergo their transformation in the earth, it is recommended to keep them confined with a gauze-net over a garden-pot filled with mould.

*Birds.*—As the summer birds of passage are now departed or departing, our winter visitants are beginning to flock in from the North. A very singular peculiarity in these migrations was first discovered by Linnæus, in the chaffinches (*Fringilla cœlebs*) of Sweden, the males migrating while the females remain stationary. It has been said that this occurs partially even in Britain, with respect to the same bird. In the case of other migratory birds, it is remarkable that the males generally arrive first, preceding the females by several days, a circumstance which the bird-catchers know how to take advantage of.

*Fish.*—It is during the present month that herrings appear in shoals upon the shores of England, and afford a rich harvest to the inhabitants of its eastern and western coasts. On the opposite shore of France, at Boulogne-sur-Mer, before the herring fishery commences, the priests, accompanied by a host of people, proceed to the sea-side, perform the ceremony of *blessing the ocean*, and invoke success on the labours of the fisherman.

#### OCTOBER.

"Where are the songs of spring? Ay, where are they?

Think not of them; thou hast thy music too,—

While barred clouds bloom the soft-dying day,

And touch the stubble plain with rosy hue."—Keats.

*The Fall of the Leaf.*—It is not enough to account for the fall

of the leaf, to say it falls because it is weakened or dead; for the mere death of a leaf is not sufficient to cause its fall, as when branches are struck by lightning, killed by a bleak wind, or die by any similar cause, the dead leaves adhere tenaciously to the dead branch. To produce the natural fall of the leaf, the branch must continue to live while its leaves die, and are thrown off by the action of its sap vessels. The change of temperature from hot to cold seems to be one of the principal circumstances connected with the death and fall of the leaf. Hence it is that European trees, growing in the southern hemisphere, cast their leaves at the approach of winter there, which is about the same period of the year that they put them forth in their own climate. The native trees of the tropics are all evergreens, and, like our hollies and pines, have no general fall of the leaf, though there is always a partial fall going forward, and, at the same time, a renewal of the loss.

*Plants.*—The ivy now begins to substitute its dark green leaves for the lighter colours of the deciduous trees which it climbs upon. It appears to be a vulgar prejudice that ivy kills the trees it clings to. If it rooted itself, as is erroneously supposed, in their bark, and fed on their juices, it might merit the accusation of a destroyer, but it derives its nourishment wholly from the ground where it is rooted; and the supposed roots on the bark of trees are only tendrils, or hold-fasts, to enable it to climb. The opinion of its injuring trees seems to have arisen (and very naturally too) from the fact, that it prefers to climb up a dead or dying branch, and will not attach itself to very young wood at all.

*Insects.*—The field-spiders during this and the preceding months cover the grass with their shining threads, known by the name of gossamer, which frequently also float on the air to a very surprising height. Spenser calls the gossamer,

“The fine nets, which oft we woven see  
Of scorched dew.”

Henry More alludes to this opinion, which seems to have been at this period commonly held.

“As light and thin as cobwebs that do fly  
In the blue air, caused by autumnal suns,  
That boils the dew that on the earth doth lie.”

Some species of spiders, as well as several moths, beetles, &c., have the very singular instinctive habit of counterfeiting death, for the purpose of deceiving or eluding their enemies. The small grey beetle (*Anobium pertinax*), so well known for making pin-holes in old furniture, is one of the most common instances of this habit; and, when it does so, it equals, if it does not exceed, the heroic firmness of the American savages, in bearing torture. You may maim these death-counterfeiting insects, pull them limb from limb, and even roast them over a slow fire, without making them move a joint, or exhibit the slightest symptom of suffering pain.

*Birds.*—When the swallows, and other small birds, are congregated for their departure about the end of last month and beginning of this, the instant a hawk makes his appearance, they troop after

him, apparently exposing themselves to unnecessary danger; but in reality, it should seem, with the design of perplexing and distracting their enemy by their numbers, their perpetual changes of direction, and their uniform endeavours to rise above him. Indeed, he is usually, in such cases, completely out-manceuvred and baffled, being unable to fix upon a single victim; and, after exerting all his address, he is often compelled to relinquish the pursuit.

*Serpents.*—It is about this season that the viper, the snake, and other hybernating reptiles, retire to their winter quarters, where they pass the cold months in a state of torpor somewhat analogous to sleep, at least to that species of sleep which is caused in warm-blooded animals by intense cold.

### NOVEMBER.

“——View the leaves, thin dancers upon air,  
Go eddying round.”—*Charles Lamb.*

*Plants.*—The strawberry tree (*Arbutus unedo*), one of our prettiest evergreens, now shows both fruit and blossoms at the same time, in situations favourable to its growth, for it does not blow freely in every exposure. In the neighbourhood of London, for example, it seldom fruits well; while, in Ireland, of which, indeed, it is partially a native, it may frequently be seen loaded with its crimson berries, and beautifully lucid flowers. Evergreens, it may be remarked, at least those in cold latitudes, are furnished with strong, tenacious, viscid juices, which are usually most abundant also (in firs, for example) at the base of the leaves, and this serves to protect them from the effects of cold and damp. Within the tropics, these glutinous juices are less required, though there all trees are evergreen; and as evergreens are usually darker in tint than deciduous plants, the tropical forests never exhibit the endless variety of shades which are so much admired in temperate climates.

*Insects.*—Those who have attended to the habits of the hearth cricket (*Gryllus domesticus*), know that it passes the hottest part of the summer in sunny situations, concealed in the crevices of walls, and heaps of rubbish. It quits its summer abode about the end of August, and fixes its residence by the fire-side of the kitchen or cottage, where it multiplies its species, and is as merry at Christmas as other insects are in the dog-days. Thus do the comforts of a warm hearth afford the cricket a safe refuge, not from death, but from temporary torpidity; which it can support for a long time, when deprived by accident of artificial warmth. If a colony of crickets, for example, be deprived, in winter, of the usual warmth of the fire around which they are established for some weeks, they will all disappear into their holes and hiding places; but no sooner is the fire re-lit, and warmth diffused, than the crickets again begin to bestir themselves, and shake off their torpor.

*Snails.*—To try the effects of winter temperature on the *Molluscous* class of animals, a few garden snails (*Helix hortensis*) may be

shut up in a perforated wafer-box; and others, such as *H. zonaria*, may be put into bottles, and by corking the bottles, cut off from all communication with the air, as well as from food and water. It will be found that those which are deprived of air will not live long, but those in the perforated boxes will retire into their shells, closing the apertures of them with thin membranes, and remaining to all appearance dead. This death, however, is only apparent; for, by dropping them into a glass containing water of the temperature of  $70^{\circ}$  or  $72^{\circ}$ , they will come out in about four or five hours. A large garden snail will sometimes support this severe confinement for several years, apparently dead all the time, and will revive upon being put into water, milk warm, quite uninjured.

#### DECEMBER.

"Heap on more wood, the wind is chill;

But let it whistle as it will,

We'll keep our merry Christmas still."—*Sir Walter Scott.*

*Plants.*—Towards the end of the month, the misseltoe is in request, along with other evergreens, to decorate churches and private houses. The singularity of the growth and form of the misseltoe brought it into repute among the Druids, for the purposes of mystical superstition, and its use has thence been continued many centuries afterwards—so difficult it is to eradicate any thing of this sort from the minds of the people when once it is fairly rooted. It was long thought to be impossible to propagate this plant. In the natural state, the seeds are said to be dropped by the missel thrush, which feeds on the berries. Lately, however, it has been successfully propagated, by causing the bruised berries, which are very viscid, to adhere to the bark of such fruit trees as have been found most congenial to their growth. Upon the bark of these the seeds readily germinate, and take root.

Some trees, such as the oak, the beech, and the hornbeam, still tenaciously retain their leaves, probably because the life of the twigs on which they grow is not sufficiently vigorous to throw them off after their brown colour indicates that they are dead.

*Insects.*—The December moth (*Eriogaster populi*) now makes its appearance. It is remarkable that, in several other species of moths which appear in the perfect state in the winter months, the female is not furnished, as the male is, with wings—though, considering the habits of female insects, this is not to be so much wondered at, for Nature leaves it to the instinct of the males to find them out; and, while they remain motionless, stationary, or nearly so, the males are pursuing their flight in every direction, continually on the wing, and seldom alighting. Besides the moth just mentioned, one or two others now make their appearance; and, in open weather, the common gnat (*Culex pipiens*), and several of its congeners, may be observed on the windows of rooms, or dancing under the shade of trees.

*Birds.*—Few naturalists of any note now believe in the submersion of swallows under water during the winter, a circum-

stance not long ago confided in by naturalists of the highest name, such as Daines Barrington, Klein, and even Linnæus himself, who talked of their assembling on reeds, and on the banks of rivers, and singing their swallow song before they dived. But, were this so, our fishermen could not fail to drag some of them from their hiding places with their nets, a thing which has never been known to happen. Independent of this, their physiological structure renders it impossible for them to exist for many minutes under water, and it is contrary to all analogy in the class of birds; for not even the sea-fowl, which live constantly in the water, are able to remain any time submerged. To put an end at once to the controversy, our European swallows have been repeatedly seen crossing the Mediterranean, towards Africa, at their autumnal departure; and M. Adanson, who was too good a naturalist to be easily deceived, found them during the winter in Senegal.

# VIII. EASTER.

The following method to find Easter is by GAUSS, a celebrated German mathematician :—

TABLE FOR THE GREGORIAN CALENDAR.

YEARS.	A	B
From 1800 to 1899 . . .	23	4
„ 1900 „ 1999 . . .	24	5
„ 2000 „ 2099 . . .	24	5
„ 2100 „ 2199 . . .	24	6
„ 2200 „ 2299 . . .	25	0
„ 2300 „ 2399 . . .	26	1
„ 2400 „ 2499 . . .	25	1

## RULE.

1. Take from the table for the period in which the year is contained, the values of . . . . . A & B
  2. Divide the year by 19, and call the remainder . . . . . *a*
  3. Divide the year by 4, and call the remainder . . . . . *b*
  4. Divide the year by 7, and call the remainder . . . . . *c*
  5. To 19 times *a* add A, divide the sum by 30, and call the remainder *d*
  6. Add twice *b*, four times *c*, six times *d*, and B; divide by 7, and call the remainder . . . . . *e*
- Then,
7. Easter will be *d* and *e* added to 22 days of March, or 9 days subtracted from *d* and *e* of April.

## EXCEPTIONS.

1. When Easter appears the 26th of April, make it the 19th.
2. When the rule gives the 25th of April, it must be taken to be the 18th, when the given year, increased by 1, being divided by 19, leaves a remainder greater than 11

## EXAMPLE.

To find Easter for 1829.

1. { Take from the table the value of . . . . .  $A = 23$   
           "  "  "  $B = 4$
2.  $1829 \div 19$  leaves remainder . . . . .  $a = 5$
3.  $1829 \div 4$  leaves remainder . . . . .  $b = 1$
4.  $1829 \div 7$  leaves remainder . . . . .  $c = 2$
5.  $\frac{19a + A}{30} = \frac{19 \times 5 + 23}{30} = \frac{95 + 23}{30} = \frac{118}{30}$  leaves re-  
     mainder . . . . .  $d = 28$
6.  $2b = 2 \times 1 = 2$   
 $4c = 4 \times 2 = 8$   
 $6d = 6 \times 28 = 168$   
 $B = 4$   
     sum =  $182 \div 7$ , remainder . . . . .  $e = 0$

Then,  $28 + 0 + 22$  of March, or  $28 + 0 - 9$  of April, which is, either way, EASTER, April 19.

For, to 22 add 28 which make 50 of March, take away 31, and 19 of April remains.

Or, from 28 of April take 9, and 19 of April remains.

The following Rule for finding Easter, which applies to the present century only, is a more simple form:—

Put  $z$  = the odd years of the date.

1. Divide  $(z + 14)$  by 19, and call the remainder  $a$ .
2. Divide  $(19a + 23)$  by 30, and call the remainder  $b$ .
3. Divide  $(155 - z - \frac{1}{4}z - b)$  by 7, and call the remainder  $c$ . (The fractional part is omitted.)

Then  $b + c - 9$ , is the day of April on which Easter falls; but if  $b + c$  be less than 10, then  $b + c + 22$ , gives the day of March for the year required.

Example, for the year 1829. Here  $z = 29$ ,  $a = 5$ ,  $b = 28$ ,  $c = 0$ .  
 herefore  $28 - 9 = 19$  April.

END OF PART I.



## PART II.

GENERAL INFORMATION on SUBJECTS of CHRONOLOGY, STATISTICS, &c.

### IX. COMPARATIVE CHRONOLOGICAL TABLE OF EUROPEAN MONARCHS,

From the time of Egbert the Great, of England, to the year 1828.

Yr.	England.	France.	Germany.*	Papal States.	Russia.	Spain.	Sweden.
800	Egbert the Great	Charlemagne Louis I.	Charlemagne Louis I.	Leo III.			
814	.	.	.	Stephen V.			
816	.	.	.	Paschal I.			
817	.	.	.	Eugene II.			
820	.	.	.	Valentine			
824	.	.	.				
825	.	.	.		.	.	Regnard [Lobrock]
827	.	.	.	Gregory IV.			
836	Ethelwulph						
843	.	Chs. the Bald	Louis II.	Sergius II.			
847	.	.	.	Leo IV.			
855	.	.	.	Benedict III.			
857	Ethelbald	.	.				
858	.	.	.	Nicholas I.		Garcia I.	
860	Ethelbert	.	.	.			
862	.	.	.	.	Rivick		
866	Ethelred I.	.	.				
868	.	.	.	Adrian II.			
872	Alfred the	.	.				
873	[Great	.	.	John VIII.			
876	.	.	Carloman Louis III. the Younger	.			
—	.	.	Chs. the Fat.	.			
877	.	Louis II. the Stammerer	.	.			
879	.	Louis III, Carloman	.	.			
—	.		.	.	Oleg		
880	.		.	.		Fortunio	
883	.		.	Martin I.			
884	.	Chs. the Fat.	.	Adrian III.			
885	.	.	.	Stephen VI.			
887	.		Arnold	.			
888	.	Hugh	.	.			
891	.	.	.	Formosus			
897	.	.	.	Stephen VII.			
898	.	Charles the Simple	.	.			
899	.	.	Louis IV, the Infant	.			
901	[Elder Edward the	.	.	[sus Rom. Formo-			
—	.	.	.	John IX.			
905	.	.	.	Benedict IV.		Sancho I.	
906	.	.	.	Leo V.			
—	.	.	.	Christopher			
907	.	.	.	Sergius III.			
910	.	.	.	Anastatius			
911	.	.	Conrad I.	.			
912	.	.	.	Lando.			
—	.	.	.	John X			
913	.	.	.		Ighor I.		
919	.	.	Henry I.	.			
922	.	Robert	.	.			
923	.	Ralph	.	.			
925	Athelstan	.	.	.			
926	.	.	.	.		Garcia II.	
928	.	.	.	Leo VI.			
929	.	.	.	Stephen VIII.			
931	.	.	.	John XI.			

\* The Emperors of Germany were heads of a Confederation of States, and Monarchs of their hereditary dominions.

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
936	.	Louis IV.	Otho the Great	Leo VII.			
940		.	.	Stephen IX.			
941	Edmund	.	.	Martin II.	[law I.		
943	.	.	.		Stwatos-		
945	.	.	.	Agapet II.			
946	Edred	Lotharius	.				
954	Edwy	.	.	John XII.			
956	Edgar	.	.	Benedict V.			
959		.	.	John XIII.	.	Sancho II.	Eric the [Victor
965		.	.				
966		.	.		Jaropolk I.		
970		.	Otho II.	Domne II.			
972		.		Benedict VI.			
973		.		Benedict VII.			
—							
974	Edward the Martyr	.	.				
975	Ethelred II	.	.				
978		.	.				
980		.	.		Waldimir [the Great		
983			Otho III.				
984	.	.	.	John XIV.			
985	.	.	.	John XV.			
986	.	Louis V		John XVI.			
987	.	Hugh Capet	.				
994	.	.	.		.	Garcia III.	Olaf Skotkong
996	.	Robert the Pious	.	Gregory V.			
997	.		.				
999	.	.	.	Silvester II.			
1000	.	.	.		.	Sancho II the Great	
1002	.	.	Henry II. the Saint	.			
1003	.	.	.	John XVII and XVIII.			
1009	.	.	.	Sergius IV.			
1012	.	.	.	Benedict VIII			
1015	.	.	.		Swiatopolk		
1016	Edmund Ironside	.	.				
1017	Canute the Great	.	.				
1018	.	.	.		Jaroslav I. [of Kiev		
1024	.	.	Conrad. the Salic	John XIX.			
1026	.	.	.		.		Edmund Jacobson
1031	.	Henry I.	.		.		
1033	.	.	.	Benedict IX.	.	Ferdin. I. in Castile	
1035	.	.	.		.	Garcia IV. in Navarre	
—		.	.		.	Ramirez I. in Arragon	
1036	Harold Hare-foot	.	.				
1039	Hardicant	.	Henry III.				
1041	Edward the Confessor	.	.				
1044	.	.	.	Gregory VI.			
1047	.	.	.	Clement II.			
1048	.	.	.	Damasia II.			
1049	.	.	.	Leo IX.			
1051	.	.	.		Isaslaw I.		Edm. III.
1054	.	.	.			Sancho IV. Navarre	

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1055	.	.	.	Victor II.	.	.	.
1056	.	.	Henry IV.	.	.	.	Stenkil
1057	.	.	.	Stephen X.	.	.	.
1058	.	.	.	Nicholas II.	.	.	.
1060	.	Philip I.	.	.	.	.	.
1061	.	.	.	Alexander II.	.	.	.
1063	.	.	.	.	.	Sancho I.	.
1065	Harold II.	.	.	.	.	Arragon	.
1066	William I.	.	.	.	.	Sancho I.	Eric VII.
1067	.	.	.	.	.	Castile	and VIII.
1072	.	.	.	.	.	Alfonzo I.	Hacon
1073	.	.	.	Gregory VII.	Swatoslaw II.	Castile	Ræde
1076	.	.	.	.	.	Sancho V.	.
1078	.	.	.	.	[I. Wsewolod	Nav.&Arr.	.
1080	.	.	.	.	.	.	Ingo and
1085	.	.	.	Victor III.	.	.	Haldstan
1087	William II	.	.	Urban II.	.	.	.
1093	.	.	.	.	Swatopolk	.	.
1094	.	.	.	.	[II.	Peter I.	.
1099	.	.	.	Pascal II.	.	Nav.&Arr.	.
1100	Henry I.	.	.	.	.	.	.
1104	.	.	.	.	.	Alphonso I.	.
1106	.	.	Henry V.	.	.	Nav.&Arr.	.
1108	.	Louis VI.	.	.	.	.	.
1109	.	the Gross	.	.	.	.	.
1112	.	.	.	.	.	Urraca, Ca.	Philip and
1113	.	.	.	.	.	.	Ingo II.
1118	.	.	.	Ielas. II.	Waldimir [II.	.	.
1119	.	.	.	Calixtus II.	.	.	.
1125	.	.	Lotharius II. the Sax.	Honorius II.	Mistislaw	.	.
1126	.	.	.	.	.	Alphon. II.	.
1130	.	.	.	Innocent II.	.	Castile	.
1132	.	.	.	.	Jaropolk II	.	.
1133	.	.	.	.	.	.	Swarker
1134	.	.	.	.	.	Garcia V. N.	.
1136	Stephen	.	.	.	.	Ramirez II.	.
1137	.	Louis VII.	.	.	.	[Arr.	.
1138	.	.	Conrad III	.	.	Petronilla	.
1143	.	.	.	.	.	and Ray-	.
1144	.	.	.	Celestine II.	Wsewolod [II.	mondo Arr.	.
1145	.	.	.	Lucius II.	.	.	.
1146	.	.	.	Eugene III.	.	.	.
1149	.	.	.	.	Isaslaw II.	.	.
1150	.	.	.	.	Jurje I. D.	.	.
1152	.	.	Frederic I.	.	.	Sancho VI.	.
1154	Henry II.	.	Barbarossa	.	.	the wise, N.	.
1155	.	.	.	Anastasius IV	.	.	.
1157	.	.	.	Adrian IV.	Andrej.	Sancho II.	Eric IX.
1158	.	.	.	.	.	Cast.	.
1159	.	.	.	.	.	Alphon. III	.
1161	.	.	.	Alexander III	.	Cast.	[kerson
							Ch. Swer-

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1162	.	.	.	.	.	Alphonso I. Arr.	.
1167	.	.	.	.	.	.	Canute [Erickso]
1173	.	.	.	.	Michel I. Wsewolod	.	.
1177	.	.	.	.	[II.]	.	.
1180	.	Philip II. Augustus	.	.	.	.	.
1181	.	.	.	Lucius III.	.	.	.
1183	.	.	.	Urban III.	.	.	.
1187	.	.	.	Gregory VIII.	.	.	.
1188	.	.	.	Clement III.	.	.	.
1189	Richard I. Cœur de L.	.	.	.	.	.	.
1190	.	.	Henry VI.	.	.	.	.
1191	.	.	.	Celestine III.	.	[Nav.]	.
1194	.	.	.	.	.	Sancho VII	.
1196	.	.	.	.	.	Peter II.	.
1198	.	.	Philip and Otho IV.	Innocent III.	.	[Arr.]	.
1199	John	.	.	.	.	.	Swerkerl
1210	.	.	.	.	.	.	Eric X.
1212	.	.	Frederic II.	.	.	.	.
1213	.	.	.	.	Jurje II.	Jas. I. Ar.	.
1214	.	.	.	.	.	Henry I. C.	.
1216	Henry III.	.	.	.	.	.	John I.
1217	.	.	.	Honorius III.	Constan-	Ferd. III. C.	.
1222	.	.	.	.	[tine.]	.	Eric XI
1223	.	Louis VIII.	.	.	.	.	.
1226	.	Louis IX. St. Louis	.	.	.	.	.
1227	.	.	.	Gregory IX.	.	.	.
1234	.	.	.	.	.	Theobald I	.
1238	.	.	.	.	Jaroslav II	[Nav.]	.
1241	.	.	.	Celestine IV.	.	.	.
1243	.	.	.	Innocent IV.	.	.	.
1245	.	.	.	.	Alexander Newscoi	.	.
1250	.	.	Conrad IV.	.	.	.	Waldam
1252	.	.	.	.	.	Alph. IV. C.	.
1253	.	.	.	.	.	Theobald	.
1254	.	.	William of Holland	Alexander IV	.	[II. Nav.]	.
1257	.	.	Richard, D of Cornwall	.	.	.	.
1262	.	.	.	Urban IV.	Jarosl. III.	.	.
1264	.	.	.	Gregory X.	.	.	.
1265	.	.	.	Clement IV.	.	.	.
1270	.	Philip III. the Bold	.	.	Wasilej I.	Henry I. [Nav.]	.
1272	Edward I.	.	.	.	.	.	.
1273	.	.	Rodolph of Hapsburgh	.	.	[Nav.]	.
1274	.	.	.	.	.	Joanna I.	.
1275	.	.	.	.	Dimitrej.	.	Magnu Ladulo
1276	.	.	.	Innocent V.	.	Peter III.	.
—	.	.	.	Adrian V.	.	[Arr.]	.
—	.	.	.	John XX.	.	.	.
1277	.	.	.	Nicholas III.	.	.	.
1281	.	.	.	Martin IV.	Andrej.	.	.
1284	.	.	.	.	.	Sanc. IV. C.	.
1285	.	Philip IV. the fair.	.	Honorius IV.	.	Alphonso III. A.	.
1288	.	.	.	Nicholas IV.	.	.	.
1290	.	.	.	.	.	.	Birger
1291	.	.	.	.	.	Jas. II. Ar.	.
1292	.	.	Adolphus of Nassau.	.	.	.	.
1294	.	.	.	Celestine V.	Danilo.	.	.
1295	.	.	.	Boniface VIII	.	Ferd. IV. C.	.

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1298	.	.	Albert of Austria.	.			
1303	.	.	.	Benedict X.			
1305	.	.	.	Clement V.	Michailow.		
1307	Edward II.	.	.	.			
1308	.	.	Henry VII.	.			
1312	.	.	.	.	.	Alphonso	
1314	.	Louis X.K. of Navarre.	Louis of Bavaria, & Fred. of Austria.	.		[V. Cast.	
1316	.	Phil. the Tall, K. of Navarre	.	John XXI.	.		
1317	.	.	.	.	Jurje III.		
1319	.	.	.	.	.	.	Magnus II.
1322	.	Charles IV. the Fair, K. of Navarre.	.	.			
1327	Edw. III.	.	.	Alexander II.	.	Alphonso IV. Arr.	
1328	.	Phil. VI. the Fortunate.	.	.	Iwan I. of Moscow.	Joanna II. [Nav.	
1334	.	.	.	Benedict XI.	.	Peter II. Arr.	
1336	.	.	.	.	Semen.		
1340	.	.	.	Clement VI.			
1342	.	.	Charles IV.	.	.	Cha. II. N.	
1346	.	.	.	.	.	Peter I. C.	
1349	.	John I. the Good.	.	.	.		
1350	.	.	.	.	.		
1353	.	.	.	Innocent VI.	Iwan II.		
1359	.	.	.	Urban V.	Dimitrej II		
1363	.	.	.	.	Dimitrej III	.	Albert of [Mecklen.
1364	.	Charles V. the Wise.	.	.			
1369	.	.	.	.	.	Hen. II. C.	
1371	.	.	.	Gregory XI.			
1377	Richard II.	.	Winceslaus	Urban VI.	.	John I. C.	
1378	.	.	.	.	.		
1379	.	Charles VI.	.	.	.	Cha. III. N.	
1380	.	.	.	.	.	John I. A.	
1386	.	.	.	.	.		
1387	.	.	.	.	Wassilej. II		Margaret.
1389	.	.	.	Boniface IX.	.	Hen. III. C.	
1390	.	.	.	.	.	Martin A.	
1395	.	.	.	.	.		
1399	Henry IV.	.	.	.	.		
1400	.	.	Robert.	.	.		
1404	.	.	.	Innocent VII.	.	John II. C.	
1406	.	.	.	Gregory XII.	.		
1409	.	.	.	Alexander V.	.		
1410	.	.	.	John XXII.	.		
1411	.	.	Sigismund.	.	.		
1412	.	.	.	.	.	Ferd. I. Arr.	Eric XIII.
1413	Henry V.	.	.	.	.		
1416	.	.	.	.	.	Alphonso V. Arr.	
1417	.	.	.	Martin V.	.		
1422	Henry VI.	Chas. VII. the Victor	.	.	.		
1425	.	.	.	.	Wasilej III	Blanche. N. [& John I. A.	
1431	.	.	.	Eugene IV.	.		
1437	.	.	Albert II. Fred. III.	.	.		Christo. III
1440	.	.	.	Nicholas V.	.		
1447	.	.	.	.	.		Chas. VIII.
1448	.	.	.	.	.	Hen. IV. C.	
1454	.	.	.	.	.		
1455	.	.	.	Calixtus III.	.		
1458	.	.	.	Pius II.	.		

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1461	Edw. IV.	Louis XI. the Prudent	.	.	.	.	.
1462	.	.	.	.	Iwan Wasilej I.	.	.
1464	.	.	.	Paul II.	.	.	.
1471	.	.	.	Sixtus IV.	.	Ferdinand II and Isabella of Castile.	.
1474	.	.	.	.	.	.	.
1479	.	.	.	.	.	Ferd. II. the Catholic, A. Eleanor Nav. Francis Phœbus Nav. Catharine Nav.	John II.
1483	Edward V. Rich. III.	Chas. VIII. the Affable	.	.	.	.	.
1484	.	.	.	Innocent VIII	.	.	.
1485	Henry VII.	.	.	Alexander VI	.	.	.
1492	.	.	.	.	.	.	.
1493	.	.	Maximi- lian I.	.	.	.	.
1498	.	Louis XII.	.	.	.	.	.
1503	.	.	.	Pius III. Julius II.	.	.	.
1505	.	.	.	.	Wasilej IV	.	.
1509	Henry VIII	.	.	.	.	.	.
1513	.	.	.	Leo X.	.	.	.
1515	.	Francis I.	.	.	.	.	.
1516	.	.	.	.	.	Charles I. Emperor	.
1519	.	.	Charles V.	.	.	Charles V.	.
1520	.	.	.	.	.	.	Christian II.
1522	.	.	.	Adrian VI.	.	.	Gustavus Wasa
1523	.	.	.	Clement VII.	.	.	.
1533	.	.	.	.	Iwan Wasilejevitch	.	.
1534	.	.	.	Paul III.	.	.	.
1547	Edw. VI.	Henry II.	.	.	.	.	.
1550	.	.	.	Julius III.	.	.	.
1553	Mary	.	.	[II. Marcellinus	.	.	.
1555	.	.	.	Paul IV.	.	Philip II.	.
1556	.	.	.	.	.	.	.
1558	Elizabeth	.	Ferd. I.	Pius IV.	.	.	.
1559	.	Francis II.	.	.	.	.	.
1560	.	Chas. IX.	.	.	.	.	Eric XIV.
1564	.	.	Maximi- lian II.	.	.	.	.
1566	.	.	.	Pius V.	.	.	.
1569	.	.	.	.	.	.	John III.
1572	.	.	.	Gregory XIII	.	.	.
1574	.	Henry III.	.	.	.	.	.
1576	.	.	Rodolph II.	.	.	.	.
1584	.	.	.	.	Feodore I.	.	.
1585	.	.	.	Sixtus V.	.	.	.
1589	.	Henry IV. the Great	.	.	.	.	.
1590	.	.	.	Urban VII. Gregory XIV.	.	.	.
1591	.	.	.	Innocent IX.	.	.	.
1592	.	.	.	Clement VIII	.	.	.
1598	.	.	.	.	Boris God- unow	Philip III.	Sigismund
1603	James I.	.	.	.	.	.	.
1604	.	.	.	.	.	.	Chas. IX.
1605	.	.	.	Leo XI. Paul V.	.	.	.
1606	.	.	.	.	Wasilej Schuiskoi	.	.
1610	.	Louis XIII	.	.	.	.	Gustavus Adolphus
1611	.	.	.	.	.	.	.

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1612	.	.	Matthias	.	.	.	.
1613	.	.	.	.	Michel Fe-	.	.
1619	.	.	Ferd. II.	.	drowitsch.	.	.
1621	.	.	.	Gregory XV.	.	Philip IV.	.
1623	.	.	.	Urban VIII.	.	.	.
1625	Charles I.	.	.	.	.	.	Christina
1632	.	.	Ferd. III.	.	.	.	.
1637	.	.	.	.	.	.	.
1643	.	Louis XIV the Great.	.	.	.	.	.
1644	.	.	.	Innocent X.	.	.	.
1645	.	.	.	.	Alexej Mic.	.	.
1653	Cromwell	.	.	.	.	.	.
1654	.	.	.	.	.	.	Charles X.
1655	.	.	.	Alex. VII.	.	.	.
1658	.	.	Leopold I.	.	.	.	.
1660	Charles II.	.	.	.	.	Charles II.	Chas. XI.
1665	.	.	.	.	.	.	.
1667	.	.	.	Clement IX.	.	.	.
1670	.	.	.	Clement X.	.	.	.
1676	.	.	.	Innocent XI.	Feodore II.	.	.
1682	.	.	.	.	Iwan Alex.	.	.
1685	James II.	.	.	.	Peter the [Great	.	.
1689	William & Mary	.	.	Alex. VIII.	.	.	.
1691	.	.	.	Innocent XII	.	.	.
1697	.	.	.	.	.	.	Chas. XII.
1700	.	.	.	Clement XI.	.	Philip V.	.
1702	Anne	.	.	.	.	.	.
1705	.	.	Joseph I.	.	.	.	.
1711	.	.	Charles VI.	.	.	.	.
1714	George I.	.	.	.	.	.	.
1715	.	Louis XV.	.	.	.	.	[anora
1719	.	.	.	.	.	.	Ulrica Ele-
1720	.	.	.	.	.	.	Frederic
1721	.	.	.	Innocent XIII	.	.	.
1724	.	.	.	Benedict XIII	.	.	.
1725	.	.	.	.	Catharine I	.	.
1727	George II.	.	.	.	Peter II.	.	.
1730	.	.	.	Clement XII.	Anne	.	.
1740	.	.	.	Benedict XIV	Iwan III.	.	.
1741	.	.	.	.	Elizabeth	.	.
1742	.	.	Chas. VII.	.	.	.	.
1745	.	.	Francis I.	.	.	.	.
			Maria Theresa	.	.	[VI. Ferdinand	.
1751	.	.	.	.	.	.	.
1753	.	.	.	Clement XIII	.	.	Adolphus
1759	.	.	.	.	.	Chas. III.	[Frederick
1760	George III.	.	.	.	Peter III.	.	.
1762	.	.	.	.	Catharine [II.	.	.
1765	.	.	Joseph II.	.	.	.	Gustavus
1769	.	.	.	Clement XIV	.	.	[III.
1771	.	.	.	.	.	.	.
1774	.	Louis XVI.	.	.	.	.	.
1775	.	.	.	Pius VI.	.	Chas. IV.	.
1788	.	.	Leopold II.	.	.	.	.
1790	.	.	Franc. II.*	.	.	.	Gustavus
1792	.	Republic	.	.	Paul I.	.	IV. Adol.
1796	.	.	.	.	.	.	.
1800	.	.	.	Pius VII.	Alexander	.	.
1801	.	.	.	.	.	.	.
1804	.	Napoleon Emperor	.	.	.	.	.

\* Upon the Establishment of the Confederation of the Rhine, in 1806, Francis ceased to be Emperor of Germany, and became hereditary Emperor of Austria, under the title of Francis I. Upon the formation of the Germanic Confederation, in 1815, the Emperor of Austria was declared hereditary head of that body.

Yr.	England.	France.	Germany.	Papal States.	Russia.	Spain.	Sweden.
1806	. .	. .	Confed. of the Rhine.	. .			
1808	. .	. .	. .	. .	. .	Ferd. VII. J. Napoleon	
1809	. .		. .	. .	. .		Chas. XIII
1814	. .	Lou. XVIII	. .	. .	. .	Ferd. VII.	
1815	. .	. .	Germanic Confed.	. .	. .		
1818		. .	. .	. .	. .	. .	Chas.
1820	George IV.	. .	. .	Leo XII.	. .	. .	John XIV.
1823	. .	. .	. .	. .	. .	. .	
1824	. .	Charles X.	. .	. .		. .	
1825	. .	. .	. .	. .	Nicholas	. .	
1828							

## II.

## THE SMALLER EUROPEAN STATES, FROM 1699.

Yr.	Denmark.	Naples.	Poland.	Portugal.	Prussia.	Sardinia.
1699	Frederic IV.	. .				
1701	. .	. .		. .	Frederic I.	
1704	. .	. .	Stanislaus (Lescinsky)			
1706	. .	. .		John V.		
1709	. .	. .	Augustus II.			
1713	. .	Charles II.	. .	. .	Fred. Wm. I.	
1720	. .	. .	. .	. .	. .	Victor Am. II.
1730	Christian VI.	. .	Augustus III.	. .	. .	Charles Eman. [nuel III.]
1733	. .	. .	. .	. .	. .	
1735	. .	Charles III.	. .	. .	Frederic II. the Great	
1740	. .	. .	. .	. .		
1746	Frederic V.	. .	. .			
1750	. .	. .	. .	Joseph Emanuel		
1759	. .	Ferdinand IV	. .			
1764	. .	. .	Stanislaus (Poniatowsky)			
1766	Christian VII	. .				
1772	. .	. .	1st Partition.			
1773	. .	. .	. .			Vict. Am. III.
1777	. .	. .	. .	Maria		
1786	. .	. .	. .	. .	Fred. W. II.	
1793	. .	. .	2d Partition.			
1795	. .	. .	3d Partition.			[IV.]
1796	. .	. .	. .	. .		Chas. Eman.
1797	. .	. .	. .	. .	Fred. W. III.	
1799	. .	. .	. .	John VI.		
1802	. .	. .	. .	. .	. .	Victor Eman.
1806	. .	. .	. .	. .		
1808	Frederic VI.	Jos. Napoleon				
1815	. .	Joach. Murat	Alexander			
1821	. .	Ferdinand I.*	. .	. .	. .	Chas. Felix.
1825	. .	. .	Nicholas			
1826	. .	Francis	. .	Pedro IV. Maria da Gloria.		
1828	. .	. .	. .			

\* Of the United Kingdom of the Two Sicilies, formerly Ferdinand IV. of Naples, and intermediately Ferdinand III. of Sicily.



## X. TABLE

OF SOME OF THE LEADING OBSERVATIONS AND DISCOVERIES IN  
MATHEMATICS AND NATURAL PHILOSOPHY;

*And of the Inventions by which they have been facilitated; with names  
and dates.*

THE object of this Table being to compress as much information as possible into a very small compass; to reject, or describe as such all doubtful matter; and avoid the confusion of common chronological tables, it has been thought best to make the arrangement of the sciences alphabetical, and trace the progress of each science chronologically. This Table is confined to Mathematics and Natural Philosophy. Chemistry, Geology, Mineralogy, &c., will be treated of in a future table. Those discoveries which are doubtful, either as to their time or their author, are marked thus (?).

[Dates marked A.C. are before Christ,—the others, the common era.]

	Date.
ACOUSTICS. The doctrine of the different sounds of vibrating strings of different lengths, and the communication of sounds to the ear by the vibration of the atmosphere, probably first explained by Pythagoras, about . . . A.C.	500
— The same mentioned by Aristotle, about . . . A.C.	300
— The conjecture of Aristotle first explained, or rather, perhaps, the theory of sound rediscovered by Galileo . . .	1600
— Velocity of sound, first investigated by Newton, before [Theory perfected by Euler and La Grange, theory and practice reconciled by La Place and Biot.] . . .	1700
— Galileo's theorem of the <i>harmonic curve</i> , demonstrated by Dr. Brooke Taylor . . .	1714
[The same further perfected by D'Alembert, Euler, Bernoulli, and La Grange, at various periods of the 18th century.]	
— Speaking trumpet, said to have been used by Alexander . . . A.C.	335
Constructed from Kircher's description, by Saland . . .	1654
Philosophically explained and brought into notice by Moreland . . .	1671
AIR BALLOON. Hint given by Galien . . .	1755
— Hint by Dr. Black as to hydrogen . . .	1767
— Constructed by Montgolfier . . .	1782
— Filled with hydrogen by Roberts and Charles, who made the first voyage . . .	1783
— Parachute invented by Le Normand . . .	1783
ALGEBRA. Where first used, and by whom, unknown.	
— Earliest writing on, by Diophantus, probably about . . .	350
— Brought into Spain by the Saracens, probably about . . .	900
— Brought into Italy by Leonard of Pisa, about . . .	1202
— Partial solution of cubic equations, by Scipio Ferreus, of Bologna . . .	1505
— Further solution by Tartalea of Brescia (communicated to Cardan) . . .	1539
— Solution of biquadratics, by Louis Ferrari . . .	1556
— The introduction of general symbols for quantities whether known or unknown, by Vieta, (the greatest step in the science) . . .	1600

ALGEBRA. *continued.*

Positive and Integral Indices, by Harriot and Descartes	
Composition of the higher equations, by Harriot	1610
Application of algebra to the expression of curves and use of indeterminate quantities, Descartes	1637
Diophantine problems, Fermat, about	1640
Negative and Fractional Indices, by Wallis	1657
Indefinite division and indefinite quotients, by Mercator	1666
General indices, by Newton	1667 or 8
The binomial theorem of Newton, the basis of the doctrine of Fluxions, and of the new analysis	1668
[The subsequent improvements are very numerous, but they are individually small.]	

## ARITHMETIC. Where invented, unknown.

Said to be brought from Egypt to Greece by Thales, about A.C.	600
Oldest treatise on, known, by Euclid (7th, 8th, and 9th Books of his Elements,) about	A. C. 300
Greek arithmetical notation indefinitely extended by the octades of Archimedes	A.C. 220
Sexagesimal arithmetic of Ptolemy, about	130
Simplified and brought very near to the principle of modern arithmetical notation, by Apollonius, about	220
Notation by nine digits, and zero, known at least as early as the 6th century in Hindostan	600
Introduced by Mohamed ben Musa from Hindostan into Arabia, about	900
Generally used by Arabian writers in arithmetic and astronomy in the 10th and 11th centuries	1000
Probably introduced by them into Spain, about	1050
The first known European work in which they appear, is a translation of Ptolemy, (in Spain) in the year	1136
Brought by Leonard of Pisa, from Bugia in Barbary, to Pisa, in	1202
Probably circulated by the Alphonsine tables, in	1252
This arithmetic generally cultivated by the Tuscans, in the 13th and 14th centuries	1300
Treatises on this notation (de Algorismo) published in many calendars in the 14th century: it was generally known and used in this country from the beginning of the 15th.	
Calendar in Corpus Christi Library, Cambridge, for 1380, contains an account of them. Calendar for 1386 in English, contains them throughout. (This almanac is very splendid, and is full of the astrological, astronomical, and medical knowledge and prejudices of the period.)	
Oldest existing date (Petrarch)	1355
The first monumental date in Arabic numerals, is on a brass plate in the church at Ware, (on Ellen Wood)	1454
Date in Caxton's "Mirrour of the World" (Arabic characters)	1480
Date of the almanac of St. Mary's Abbey, Cupar, Angus	1482
First printed book on algebra and arithmetic, by Lucas de Bargo, in	1484
The rent-roll of the Bishop of St. Andrew's)	1490
Introduction into the university registers in England, not before	1500
First work printed in England on arithmetic, (de Arte Supputandi) by Tonstall, Bishop of Durham, in	1522
Decimal fractions considered for the first time in La Disme of Stevinus, published in	1590
This work translated into English	1608
Their theory and notation perfected by Lord Napier in his Rabbologia	1617

ARITHMETIC, continued.

— Continued fractions, by Lord Brounker, P.R.S. . . . 1670  
[Since this, any alterations have been merely formal.]

ARITHMETIC OF SINES. By Euler, about . . . 1750  
[The theory had been hinted at by Christian Mayer in 1727.]

ASTRONOMY. Probably the first science studied; but when, or by whom, not known. Cycle of the moon estimated at a very early period.

— Observations at Babylon, transmitted to Aristotle by Callisthenes (according to Porphyry,) about . . . A.C. 2250

— La Place speaks confidently of Chinese observations . . . A.C. 1100

— Eclipses of the moon observed at Babylon, with accuracy, . . . A.C. 719, 720

— Globular form of the earth, the five zones, some of the principal circles of the sphere, the opacity of the moon, and the true cause of lunar eclipses taught, and an eclipse predicted by Thales of Miletus, about . . . A.C. 640

— That the planets are unconnected with the earth; that they are the habitations of animated beings; that the fixed stars are the centres of other systems; and that the earth moves round the centre of the system of the world, maintained by Anaximander (the earliest philosophic astronomer on record), who is also said to have been the inventor of maps and charts. He was born about . . . A.C. 610

— That the earth is a plane, and that the heavens are a firmament (*σπίς*), or solid substance, like the earth, maintained by Anaximenes, who is said to be the inventor of sun-dials (though probably only the introducer of them into Greece.) He was born about . . . A.C. 554

— That the ethereal, or upper regions of the atmosphere, were fire; that the fire drew up from the earth, and ignited, masses of stone, which thus became stars; that the comets were wandering stars; that the light of small stars occasioned the white colour of the milky way, and that the moon is irregular in its surface, and habitable like the earth, maintained by Anaxagoras—a meteoric stone that fell in Thrace, probably misled him as to the ethereal regions and the stars. His conjectures with regard to the milky way and the moon have been confirmed, as far as observations have been carried. The same philosopher was the first who wrote on the phases of the moon and eclipses. He was banished from Athens, on a charge of insulting and contemning the gods, by teaching natural philosophy. He was born about . . . A.C. 500

— Pythagoras, the disciple of Thales, travelled, like his master, into the east, and, like him, corrected the errors into which his countrymen had fallen. He demonstrated, from the varying altitudes of the stars by change of place, that the earth must be round; that there might be antipodes on the opposite part of the globe; that Venus was the morning and evening star; that the universe consisted of twelve spheres—the sphere of the earth, the sphere of the water, the sphere of the air, the sphere of fire, the spheres of the moon, the sun, Venus, Mercury, Mars, Jupiter, and Saturn, and the sphere of the stars. He admitted the idea of a plurality of worlds, and even calculated the height of the people in the moon; and he maintained that the motions of the twelve spheres must produce delightful sounds inaudible to mortal ears, which he called "the music of the spheres." He was persecuted

ASTRONOMY, *continued.*

- and is said to have perished with hunger, at the age of eighty, about . . . . . A.C. 506
- Democritus maintained that more planets would be discovered about . . . . . A.C. 450
- Metonic cycle of 19 years 7 months, as the period of coincidence in the motions of the sun and moon, introduced 16th July . . . . . A.C. 433
- The lunar month estimated at 29 d. 12 h. 43' 38", and the year at  $365\frac{1}{4}$  days, by Eudoxus, who died about . . . . . A.C. 368
- [The same philosopher attempted to explain the planetary motions, by a very complicated assemblage of concentric spheres.]
- An occultation of Mars by the moon; and one of a star by Jupiter, observed by Aristotle, about . . . . . A.C. 357
- About the same time Pytheas of Marseilles is said to have travelled to Iceland, and seen the sun in the north; he determined the obliquity of the ecliptic at  $23^{\circ} 50'$ , and is said to have been the first that observed the dependence of the tides upon the moon.
- [This may be considered as the termination of the first epoch in the history of astronomy; and though some of the conjectures made during it were sagacious enough, there were no great connecting principles. They had no idea of the distances of the heavenly bodies, or the means of ascertaining them; and they had no other notion of the stability of the system, but that of its being upheld by solid spheres. Only one attempt was made to account for the stability of the earth; that by Parmenides, who argued upon what is called the *sufficient reason*; that it had no reason to fall in one way rather than another, could not fall all ways at once, and therefore stood. In the next epoch, that during which the school of Alexandria flourished, the first of these desiderata was supplied, and practical astronomy became a science; but it was reserved for modern times to supply the latter, and perfect the theory of this most sublime and beautiful branch of human knowledge.]
- The positions of the stars with regard to the equator, and the equinoxes determined by Aristillus and Timarchus, about . . . . . A.C. 300
- Relative distances of the sun and moon, first calculated geometrically, by Aristarchus, who also maintained the stability of the sun, about . . . . . A.C. 280
- The magnitude of the earth calculated, from the measuring of an arc of a meridian, by Eratosthenes, about . . . . . A.C. 240
- Planetarium constructed by Archimedes, before . . . . . A.C. 212
- The whole science revised; the true length of the year found; the equation of time pointed out; the motion of the moon's nodes, and the inclination of her orbit; the latitudes and longitudes of more than 1000 stars determined; table of terrestrial latitudes and longitudes projected, and first meridian referred to the Canary isles, by Hipparchus, about . . . . . A.C. 140
- [After this, little was done for nearly 300 years.]
- The second inequality, or "evection" of the moon discovered; the places and distances of the planets accurately observed; the precession of the equinoxes confirmed; the system of epicycles for explaining the inequalities of the celestial motions introduced, and general tables drawn up by Ptolemy, about . . . . . 130

**ASTRONOMY, continued.**

[The science neglected for more than 600 years.]	
Resumed by the Arabs, about . . . . .	800
Refraction of the atmosphere and cause of twilight explained by Alhazen, about . . . . .	1001
Alphonsine tables constructed, under the patronage of Alphonso X., of Leon and Castile . . . . .	1284
Very accurate tables formed by Ulugh Beigh, a Tartar prince . . . . .	1437
Clock first used in astronomy, by Walther, before . . . . .	1500
The true doctrine of the celestial motions revived by Copernicus . . . . .	1530
Observation greatly improved by Tycho Brahe, who died . . . . .	1601
The true laws of the planetary motions discovered by Kepler, who died . . . . .	1631
Transit of Mercury over the sun, observed by Gassendi . . . . .	1631
[About the same time Horrox observed the transit of Venus, and Bayer made his catalogue of the stars.]	
Telescope used in astronomy, innumerable stars, the satellites of Jupiter, a peculiarity in the form of Saturn, and many other phenomena discovered by Galileo, who was compelled to deny the truth by seven Cardinals, in 1633. He died . . . . .	1642
Degree of the meridian measured in France, and magnitude of the earth determined by Picart . . . . .	1669
Map of the moon constructed by Hevelius . . . . .	1670
PRINCIPIA PUBLISHED . . . . .	1687
Ring and fourth satellite of Saturn discovered by Huygens. He died . . . . .	1688
History of the heavens and catalogue of the stars completed by Flamstead, after thirty-three years labour . . . . .	1688
Inequalities of the pendulum in different latitudes, discovered by Richer, (from these, Huygens inferred the spheroidal figure of the earth.) He died . . . . .	1696
Four satellites of Saturn; the diurnal rotation of Jupiter, Venus, and Mars; the zodaical light, and other discoveries by Cassini. He died . . . . .	1712
Parallax of the sun: lunar theory, laws of comets, Dr. Halley. He died . . . . .	1742
Method of finding the longitude by the distances of the moon from the sun, or stars . . . . .	
Approximate solution of the problem of the three bodies by Clairault . . . . .	1747
Reappearance of Halley's comet . . . . .	1758
Aberration of the stars and nutation of the earth's axis discovered, and law of atmospheric refraction investigated, by Dr. Bradley. He died . . . . .	1762
Solar and lunar tables and catalogue of the stars constructed by Mayer, of Gottingen. He died . . . . .	1762
Celestial inequalities found to be periodical by La Grange, about . . . . .	1780
Uranus, with its six satellites, and two satellites of Saturn discovered;—early observations of the motions of double stars;—and the probable motion of the whole solar system toward the constellation Hercules;—by Dr. Herschel, from . . . . .	1781
Ceres discovered by Piazzi . . . . .	1801
Pallas, by Dr. Olbers . . . . .	1802
Juno, by Mr. Harding . . . . .	1804
Vesta, by Dr. Olbers . . . . .	1807
MECANIQUE CELESTE published, periods of the planetary inequalities investigated, and many improvements made by Laplace . . . . .	1799
BAROMETER. Invented by Torricelli . . . . .	1643

	Date.
<b>BAROMETER, continued.</b>	
—— Pressure of the air proved by Pascal . . . . .	1648
—— Employed as a weather-glass, and for the mensuration of heights, about . . . . .	1660
<b>CONIC SECTIONS.</b> Supposed first author who wrote on their properties, Menæchmus (probably) . . . . . A.C.	300
—— Complete treatise on, by Apollonius of Perga, about . . . . . A.C.	150
—— Translated by the Arabs, about . . . . .	850
—— Seven remaining books of the eight of Apollonius, translated by Borelli, in . . . . .	1661
[The parabola applied to projectiles by Galileo, and the ellipse to the orbits of planets by Kepler.]	
<b>COINING-PRESS.</b> Said to be invented by Antonie Brucher in . . . . .	1553
—— Introduced into England in . . . . .	1562
—— <b>MACHINERY.</b> Introduced by Boulton and Watt, at Soho, near Birmingham, about . . . . .	1800
<b>DIVING-BELL,</b> mentioned, though obscurely, by Aristotle . . . . . A.C.	325
—— First used in Europe . . . . .	1509
—— Said to have been used on the coast of Mull in searching for the wreck of part of the Armada, before . . . . .	1669
<b>ELECTRICITY,</b> of amber, known to Thales, . . . . . A.C.	600
—— Found in various substances by Dr. Gilbert . . . . .	1600
—— Substances classed as electrics or non-conductors, and non-electrics or conductors, and the identity of Electricity and lightning hinted at by Mr. Gray, about . . . . .	1730
—— Identity proved by Franklin . . . . .	1752
<b>ELECTRO-MAGNETISM.</b> First experiments by Professor Oersted (of Copenhagen) to determine some analogies between Magnetism and Electricity, which relations had previously been imperfectly detected by Ritter . . . . .	1807
—— The principle more completely established by Oersted . . . . .	1820
[The discovery was followed by subsequent experiments in England, France, and Germany.]	
<b>FLUXIONS,</b> invented by Newton . . . . .	1669
—— Differential calculus, by Leibnitz . . . . .	1684
[The finest applications of the calculus, by Newton, Euler, Lagrange, and Laplace.]	
<b>GALVANISM.</b> First publication on, by Galvani . . . . .	1798
—— Voltaic pile . . . . .	1800
—— Decomposition of the alkalis and earths, by Davy, 1806 to . . . . .	1820
<b>GEOMETRY,</b> when first used not known . . . . .	
—— Introduced into Greece by Thales, about . . . . . A.C.	640
—— Euclid's Elements compiled, about . . . . . A.C.	280
—— Relation of the sphere and cylinder, Archimedes, about . . . . . A.C.	240
—— Properties of the spiral, Conon, about same time. . . . .	
—— Trigonometry, Geber ben Alpha, about . . . . .	1050
<b>GRADUATING ENGINE.</b> By Hindley of York, about . . . . .	1740
—— Ramsden's dividing machine, which received a premium from the Board of Longitude . . . . .	1774
<b>GUNNERY.</b> First treatise on, by Tartaglia, Venice . . . . .	1537
—— Path of a projectile determined by Galileo . . . . .	1638
—— Path in a resisting medium determined by Bernoulli? . . . . .	
—— Theory perfected by Robins . . . . .	1742
<b>HOROLOGY.</b> Clepsydræ, or water clocks, when first introduced, not known . . . . .	
—— Toothed wheels applied to them by Ctesibius, about . . . . . A.C.	140
—— Found by Cæsar on invading Britain . . . . . A.C.	55
—— Another said to have been constructed by Richard, Abbot of St. Alban's, about . . . . .	1326
—— Inventor of the scapement clock not known (supposed to be Gerbert, about 1000). One said to be made at Paris by Vick . . . . .	1370

**HOROLOGY, continued.**

- Pendulum affirmed to have been adapted by Galileo the younger . . . . . 1649?
- Christian Huygens contested the priority of this discovery, and made a pendulum clock, before . . . . . 1658-  
[It was affirmed by Grignon that the first pendulum clock was made in England by Robert Harris, in 1641, and erected in the church of St. Paul's Covent Garden.]
- Dead beat and horizontal escapements by Graham, about . . . 1700  
[The subsequent principal improvements were, the spiral-balance spring suggested, and the duplex scapement invented, by Dr. Hooke—pivot holes jewelled by Facio—detached scapement invented by Mudge, and improved by Berthoud, Arnold, Earnshaw, and others]

**HYDRODYNAMICS.** Probably first studied in the Alexandrian school, about . . . . . A.C. 300

- Pressure of fluids discovered by Archimedes, about . . . . . A.C. 250
- Forcing-pump and air fountain invented by Hero, about A.C. 120
- Water-mills known about the time of the birth of Christ.
- Experiments on running water, and the quantities discharged from different sized orifices at different depths, by Julius Frontinus . . . . . 110
- The science revived by Galileo, about . . . . . 1600
- Effect of Atmospheric pressure on fluids, Torricelli, Viviani, and Pascal, 1643 to . . . . . 1647
- Capillary attraction discovered by Rohault about . . . . . 1659
- By Boyle, about same time.
- Hydrostatical press (since brought into use by Bramah), Pascal . . . . . 1664 *Acc.*
- Theory and phenomena of rivers, Guglielmini . . . . . 1697
- Correct theory of fluids, and oscillation of waves, Newton . . . 1714
- Equilibrium of fluids, D'Alembert . . . . . 1734
- Scientific form given to Hydrodynamics by Daniel Bernoulli . . . 1738
- Resistance of fluids, the same . . . . . 1752
- LOGARITHMS.** Invented by Napier. Published . . . . . 1617
- Proposed change of the base by Briggs . . . . . 1615
- Logarithmic sines, &c., calculated; and Logarithmic scale constructed by Gunter, about . . . . . 1620
- Changed to the present form by Briggs . . . . . 1633
- MAGNETISM.** Mariner's compass in use in Europe before . . . 1150  
[Said to have been used much earlier for land travelling in China.]
- North and south poles of the magnet described by Norman . . . 1581
- Experiments on Magnetism, by Dr. Gilbert . . . . . 1600
- Making of artificial magnets explained by the same.

**MECHANICS.** The time when the simple mechanical powers were first introduced, not known; nor even the machinery by which the immense masses of stone which are found in some of the ancient edifices were moved and elevated.

- First writing on Mechanics by Aristotle, about . . . . . A.C. 320
- The fundamental property of the lever demonstrated; the pulley said to be demonstrated; and the centre of gravity treated of by Archimedes . . . . . A.C. 205
- Hand-mill, or quern, used at a very early period. Remains of Roman ones found in Yorkshire.
- Cattle-mills (*mole jumentariæ*), also used by the Romans.
- Water-mill (probably invented in Asia)—the first described was near the dwelling of Mithridates, about . . . . . A.C. 70
- Water-mill erected on the Tiber, about . . . . . A.C. 50
- Roman water-mills placed on the Canals, about . . . . . 500?
- Floating-mills on the Tiber, about . . . . . 536
- Tide-mills at Venice, about . . . . . 1078

MECHANICS, *continued*.

— Wind-mills, when introduced uncertain, common in the 12th century . . . . .	1200
— Saw-mills (said to be in use) at Augsburg . . . . .	1332
— Theory of the inclined plane investigated by Cardan, about . . . . .	1540
— Work on statics, by Stevinus . . . . .	1586
— Theory of falling bodies, Galileo . . . . .	1638
— Theory of oscillation, Huygens, about . . . . .	1647
— Laws of collision, Wallis, Huygens, Wren, about . . . . .	1662
— Epicycloidal form of the teeth of wheels, Roemer . . . . .	1675
— Percussion and animal mechanics, Borelli; he died . . . . .	1679
— Application of mechanics to astronomy, parallelism of forces, laws of motion, &c., Newton . . . . .	1679?
— Problem of the catenary with the analysis, Dr. Gregory . . . . .	1697
— Spirit level (and many other valuable inventions), by Dr. Hooke, from 1660 to . . . . .	1702

NAVIGATION. Plane charts and mariner's compass used about . . . . .	1420
— Variation of the compass discovered by Columbus . . . . .	1492
— That the oblique rhumb lines are spirals, discovered by Nonius . . . . .	1537
— First treatise on . . . . .	1545
— The log first mentioned by Bourne . . . . .	1577
— Mercator's chart . . . . .	1599
— Davis's quadrant, or backstaff, for measuring angles, about . . . . .	1600
— Logarithmic tables applied to navigation by Gunter . . . . .	1620
— Middle latitude sailing introduced . . . . .	1623
— Norwood's mensuration of a degree . . . . .	1631
— Hadley's quadrant . . . . .	1731
— Harrison's time-keeper used . . . . .	1764
— Nautical almanac first published . . . . .	1767
— Barlow's theory of the deviation of the compass . . . . .	1820

## OBSERVATORY. One of the first supposed to have been the temple of Belus at Babylon; and another, the (reputed) tomb of Osymandyas in Egypt.

— The first in authentic history at Alexandria, about . . . . . A.C.	300
— First modern meridional instrument, by Copernicus . . . . .	1540
— First observatory at Cassel . . . . .	1561
— Tycho Brahe's at Uranibourg . . . . .	1576
— Astronomical tower at Copenhagen . . . . .	1657
— Royal (French) . . . . .	1667
— Royal Observatory at Greenwich . . . . .	1675
— Berlin, erected under the direction of Leibnitz . . . . .	1711
— Petersburg . . . . .	1725
— Oxford . . . . .	1772
— Dublin . . . . .	1783
— Cambridge . . . . .	1824

OPTICS. Burning lenses known at Athens at least . . . . . A.C.	424
— Two of the leading principles known to the Platonists, A.C. . . . .	300
— First treatise on, by Euclid, about . . . . . A.C.	280
— The magnifying power of convex glasses and concave mirrors, and the prismatic colours produced by angular glass, mentioned by Seneca, about . . . . .	50
— Treatise on Optics, by Ptolemy, about . . . . .	120
— Greatly improved by Alhazen, about . . . . .	1108
— Hints for spectacles and telescopes given by Roger Bacon, about . . . . .	1280
— Spectacles (said to be) invented by Salvinus Armatus, of Pisa, before . . . . .	1300
— Camera obscura said to have been invented by Baptista Porta . . . . .	1560
— Telescopes invented by Leonard Digges, about . . . . .	1571
— Telescope made by Jansen (who is said also to have invented the microscope), about . . . . .	1609



OPTICS, *continued.*

[The same instrument constructed by Galileo, without using the production of Jansen.]

— Astronomical telescope suggested by Kepler	1611
— Microscope, according to Huygens, invented by Drebbel, about 1621	
[Jansen and Galileo have also been stated to be the inventors.]	
— Cassegrainian reflector	
— Law of refraction discovered by Snellius, about	1624
— Reflecting telescope, James Gregory	1663
— , Newton	1666
— Motion and velocity of light, Roemer, and after him Cassini (velocity 190,000,000 miles in sixteen minutes) about	1667
— Double refraction explained by Bartholinus	1669
— Newton's discoveries	1674
— Telescopes with a single lens, by Tschirnhausen, about	1690
— Polarization of light. Huygens, about	1692
— Structure of the eye explained by Petit, about	1700
— Achromatic telescope constructed by Mr. Hall (but not made public) in	1733
— Constructed by Dollond, most likely without any knowledge of Hall's	1757
— Herschell's great reflecting telescope, erected at Slough	1789
— Camera lucida invented by Dr. Wollaston	1807
— Ramage's front-view reflecting telescope erected at Greenwich	1820
PNEUMATICS. Pressure of the air discovered, by Torricelli	
— Found to vary with the height, by Pascal	1645
— Air-pump invented by Otto Guericke	1647
— Air pump improved and rendered more manageable by Boyle, after the publication of "Mechanica Hydraulicæ Pneumaticæ," by Schottus, in which Guericke's experiments were described	1654
SHIP-BUILDING. First treated as a science by Hoste	1657
STEAM-ENGINE. Idea of, by the Marquis of Worcester, in his Century of Inventions, as a "way to drive up water by fire," published in	1696
— Captain Savery's engine for raising water	1663
— Papin's engine exhibited to the Royal Society	1698
— Atmospheric engine, by Savery and Newcomen	1699
— Watt's invention of performing condensation in a separate vessel from the cylinder	1713
— His first patent	1765
— His engines upon a large scale erected in manufactories, and his patent renewed by act of parliament	1769
— made to give a rotary motion, Washborough's patent	1775
— His expansion engine	1778-9
— Double-acting engine proposed by Dr. Falck on Newcomen's principle	1778
— Double engine executed by Watt	1779
— Trevithick's high-pressure engine	1781
— Woolf's double-cylinder expansion engine	1802
STEAM-BOAT. Patent taken out for, by Hulls	1804
— Tried under the direction of Mr. Miller, of Dalswinton, in	1736
— Put in practice on the Clyde	1788
— in America	1802
THERMOMETER. Very imperfect ones invented, according to Italian writers by Santorio, according to Dutch writers by Drebbel, before	1807
— Fahrenheit's	1626
— Reaumur's—(the scale called Reaumur's soon after 1730—the mode of construction, by substituting quicksilver for spirits, several years after.)	1730
— The Centigrade, by Celsius	1742

# XI. REMARKABLE PLANTS.

WITH THE DATES OF THEIR INTRODUCTION INTO ENGLAND AS FAR AS RECORDED.

## PART I.

HARDY TREES AND SHRUBS, VALUABLE AS TIMBER, AS ORNAMENTS, AS YIELDING FRUIT, AS PRODUCING OIL, GUM, &c. OR IN MEDICINE\*.

[Of those Genera indigenous to North America, which are *all* more or less ornamental, only the species first introduced to England has been selected.]

### EXPLANATION OF SIGNS.

♂ Small Shrub.	♂ Small Tree.	○ Climbing.
♂ Large Shrub.	♂ Large Tree.	Δ Evergreen.

Acacia Julibrissim . . . . .	5	Levant, abt.	1745
Acer rubrum . . . . .	♂	Scarlet Maple . . . . .	N.Amer. be. 1656
— Negundo . . . . .	♂	Ash leaved Maple . . . . .	N.Amer. be. 1688
Æsculus Hippocastanum . . . . .	♂	Common Horse Chesnut . . . . .	Asia, before 1629
— Pavia . . . . .	♂	Scarlet Horse Chesnut . . . . .	N. America 1711
Ailanthus glandulosa . . . . .	♂	Chinese Sumach . . . . .	China, abt. 1751
Alnus oblongata . . . . .		Turkey Alder . . . . .	S. of Europe 1730
— serrulata . . . . .		Notch-leaved Alder . . . . .	N. Amer. 1769
Amorpha fruticosa . . . . .	♂	Bastard Indigo . . . . .	Carolina 1724
Amygdalus Persica . . . . .	♂	Peach Tree, Nectarine Tree . . . . .	Persia 1562
— communis . . . . .	♂	Almond Tree . . . . .	Barbary 1548
Andromeda mariana . . . . .	♂		N. America 1736
— arborea . . . . .	♂	Sorrel Tree . . . . .	N. Amer. bef. 1752
Annona triloba . . . . .	♂	Custard Apple . . . . .	N. America 1736
Arancaria imbricata . . . . .	♂Δ	Sir Joseph Banks's Pine . . . . .	Chili 1796
Arbutus Andrachne . . . . .	♂Δ	Oriental Strawberry Tree . . . . .	Levant 1724
Aristolochia Sippo . . . . .	♂		N. Amer. abt. 1763
Aristotelia Macqui . . . . .	♂		Chili 1773
Astragalus Tragacantha . . . . .	♂Δ	Gum Tragacanth . . . . .	S. of Eu. be. 1640
Atragene sibirica . . . . .	♂○		Siberia, bef. 1753
Aucuba japonica . . . . .	♂Δ	Gold plant . . . . .	Japan 1783
Azalea viscosa . . . . .	♂		N. Amer. bef. 1731
Betula nigra . . . . .	♂	Black Birch . . . . .	N. America 1736
Bignonia radicans . . . . .	♂○	Trumpet-flower . . . . .	N. Amer. ab. 1640
Broussonetia papyrifera . . . . .	♂	Paper Mulberry . . . . .	Japan bef. 1751
Buddleia globosa . . . . .	♂		Chili 1774
Buxus balearica . . . . .	♂Δ	Minorca Box . . . . .	Balearic I. b. 1780
Calycanthus floridus . . . . .	♂	Carolina Allspice . . . . .	Carolina 1726
Catalpa syringæfolia . . . . .	♂		N. Amer. abt. 1726
Celtis australis . . . . .	♂	Nettle Tree . . . . .	S. Europe, be. 1596
Cercis Siliquastrum . . . . .	♂	Judas Tree . . . . .	S. Europe, bef. 1596
Chionanthus virginica . . . . .	♂	Fringe Tree . . . . .	N. America 1736
Clethra alnifolia . . . . .	♂		N. Amer. bef. 1731
Colutea arborescens . . . . .	♂	Bladder Senna . . . . .	Levant 1568
Comptonia asplenifolia . . . . .	♂	Sweet Fern Bush . . . . .	N. America 1714

\* This table is complete with regard to the class to which it extends. In the same manner the chronology of other classes will be annually given.

<i>Corchorus japonicus</i>	China	1804
<i>Cornus mascula</i>	Cornelian Cherry	Austria 1596
— <i>sericea</i>	Blue-berried Dog-wood	N. Amer. 1683
<i>Cratægus coccinea</i>	American Hawthorn	N. Amer. be. 1683
— <i>Azarolus</i>	Azarole	S. of Eur. be. 1640
<i>Cupressus sempervirens</i>	Common Cypress	Δ Candia bef. 1548
— <i>disticha</i>	Deciduous Cypress	N. Amer. bef. 1640
— <i>lusitana</i>	Cedar of Goa	Δ Goa, before 1683
<i>Cytisus Laburnum</i>	Laburnum or Golden-chain	Aus., &c. bef. 1596
<i>Diospyros Lotus</i>	Date Plum	Barbary, bef. 1596
— <i>virginiana</i>	Pishamin Plum	N. Amer. bef. 1629
<i>Elæagnus angustifolia</i>	Oleaster	Δ S. of Eur. be. 1576
<i>Epigæa repens</i>	Pigeon Berry	Δ N. America 1736
<i>Euonymus Americanus</i>	Evergreen Spindle-tree	Δ N. Amer. 1683
<i>Fagus ferruginea</i>	American Beech	N. Amer. 1766
<i>Ficus Carica</i>	Common Fig Tree	S. Europ. bef. 1548
<i>Fontanesia phylliræoides</i>		Syria 1787
<i>Fothergillia alnifolia</i>		N. America 1765
<i>Fraxinus Ornus</i>	Flowering Ash	Italy 1710
— <i>americana</i>	American Ash	N. America 1723
<i>Gaultheria procumbens</i>	Mountain Tea	Δ N. Amer. b. 1762
<i>Gleditschia triacanthos</i>	Three-thorned Acacia	N. Amer. bef. 1700
<i>Glycine frutescens</i>	Kidney Bean Tree	Carolina 1724
<i>Gordonia Lasianthus</i>	Loblolly Bay	N. Amer. bef. 1739
<i>Gymnocladus canadensis</i>	Hardy Bonduc	Canada 1748
<i>Halesia tetraptera</i>	Snow Drop Tree	Carolina 1756
<i>Hamamelis virginica</i>	American Witch Hazel	N. Amer. 1736
<i>Hibiscus syriacus</i>	Althæa frutex	Syria, before 1596
<i>Hippophae canadensis</i>	Canadian Sea Buckthorn	Δ N. Amer. b. 1759
<i>Hydrangea arborescens</i>		Virginia, bef. 1736
<i>Hyssopus officinalis</i>	Hyssop	Δ S. of Eur. b. 1548
<i>Ilex vomitoria</i>	South Sea Tea	Δ W. Florida 1700
— <i>opaca</i>	Carolina Holly	Δ Carolina 1744
<i>Illicium floricanum</i>	Aniseed Tree	Δ Florida 1766
<i>Itea virginica</i>		N. America 1744
<i>Jasminum officinale</i>	Common Jasmine	Δ Circassia be. 1548
<i>Juglans nigra</i>	Black Walnut	N. Amer. bef. 1629
— <i>alba</i>	White Hickery	N. Amer. bef. 1629
<i>Juniperus bermudiana</i>	Bermudas Cedar	Δ Bermudas b. 1683
— <i>Sabina</i>	Savin	Δ S. Europe b. 1584
— <i>virginiana</i>	Red Cedar	Δ N. Amer. b. 1664
<i>Kalmia latifolia</i>		Δ N. Amer. 1734
<i>Kœlreuteria paniculata</i>		China, ab. 1763
<i>Laurus nobilis</i>	Sweet Bay	Δ Italy, before 1548
— <i>Sassafras</i>	Sassafras Tree	N. Amer. bef. 1633
— <i>Benzoin</i>	Benjamin Tree	Virginia, bef. 1683
<i>Lavandula spica</i>	Lavender	Δ S. of Eur. b. 1568
<i>Ledum buxifolium</i>		Δ Carolina 1736
<i>Ligustricum lucidum</i>	Chinese Privet or Wax Tree	China, about 1794
<i>Liquidambar styraciflua</i>	Liquidamber	N. Amer. bef. 1683
<i>Liriodendron tulipifera</i>	Tulip Tree	N. Amer. abt. 1663
<i>Lonicera sempervirens</i>	Trumpet Honeysuckle	N. America 1656
— <i>symphoricarpos</i>	St. Peter's Wort	N. America 1730
<i>Lupinus arboreus</i>	Tree Lupine	about 1793
<i>Lycium barbarum</i>	Box Thorn	Δ Europe, bef. 1696
<i>Maclura aurantiaca</i>	Osage Apple	N. America 1818

<i>Magnolia grandiflora</i> . . .	Laurel-leaved Magnolia . . .	♂ Δ N. Amer. 1734
— <i>glauca</i> . . .	Swamp Magnolia . . .	♂ N. America 1688
— <i>conspicua</i> . . .	Youlan . . .	♂ China 1789
<i>Mespilus Pyracantha</i> . . .	Evergreen Thorn . . .	♂ Δ S. Europe 1629
— <i>japonica</i> . . .	Loquat . . .	♂ Δ Japan 1787
<i>Morus nigra</i> . . .	Common Mulberry . . .	♂ Italy, before 1548
— <i>alba</i> . . .	White Mulberry . . .	♂ China, before 1596
— <i>rubra</i> . . .	Red Mulberry . . .	♂ N. Amer. bef. 1629
<i>Mylocaryum ligustrinum</i> . . .	Buck Wheat Tree . . .	♂ Georgia 1786
<i>Myrica cerifera</i> . . .	Candleberry Myrtle . . .	♂ N. America 1699
<i>Ostrya vulgaris</i> . . .	Hop Hornbeam . . .	♂ Italy . . . 1724
<i>Passiflora cærulea</i> . . .	Common Passion flower . . .	♂ Brazil . . . 1699
<i>Philadelphus coronarius</i> . . .	Syringa or Mock Orange . . .	♂ S. of Europe, b. 1596
<i>Phillyrea</i> . . .	. . .	♂ Δ S. of Eur. b. 1597
<i>Pinus Pinaster</i> . . .	Cluster Pine . . .	♂ Δ S. of Eur. b. 1596
— <i>Pinea</i> . . .	Stone Pine . . .	♂ Δ S. of Eur. b. 1548
— <i>Tæda</i> . . .	Frankincense Pine . . .	♂ Δ N. Amer. b. 1713
— <i>Strobus</i> . . .	Weymouth Pine . . .	♂ Δ N. Amer. 1705
— <i>Abies</i> . . .	Norway Spruce . . .	♂ Δ N. of Eur. b. 1548
— <i>Picea</i> . . .	Silver Fir . . .	♂ Δ Switz. bef. 1603
— <i>balsamea</i> . . .	Balm of Gilead Fir . . .	♂ Δ Virginia, be. 1696
— <i>canadensis</i> . . .	Hemlock Spruce . . .	♂ N. America 1736
— <i>Larix</i> . . .	Common Larch . . .	♂ Switzer. bef. 1629
— <i>Cedrus</i> . . .	Cedar of Lebanon . . .	♂ Δ Levant, bef. 1683
<i>Pistacia officinalis</i> . . .	Pistachia Tree . . .	♂ Levant, bef. 1570
— <i>Terebinthinus</i> . . .	Turpentine Tree . . .	♂ Barbary, be. 1656
<i>Platanus orientalis</i> . . .	Oriental Plane . . .	♂ Levant, bef. 1548
— <i>occidentalis</i> . . .	American Plane . . .	♂ N. Amer. bef. 1640
<i>Populus dilatata</i> . . .	Lombardy or Po Poplar . . .	♂ Italy, about 1758
— <i>balsamifera</i> . . .	Tacamahac Poplar . . .	♂ N. Amer. be. 1692
<i>Prinos verticillatus</i> . . .	Winter berry . . .	♂ Virginia 1736
<i>Prunus Armeniaca</i> . . .	Apricot Tree . . .	♂ before 1548
— <i>serotina</i> . . .	American Bird Cherry . . .	♂ N. Amer. bef. 1629
— <i>Lusitanica</i> . . .	Portugal Laurel . . .	♂ Δ Portugal, be. 1648
— <i>Laurocerasus</i> . . .	Common Laurel . . .	♂ Δ Levant, bef. 1629
<i>Ptelea trifoliata</i> . . .	Shrubby Trefoil . . .	N. Amer. 1704
<i>Punica Granatum</i> . . .	Pomegranate Tree . . .	♂ Spain, before 1548
<i>Pyrus Botryapium</i> . . .	Snowy Pear . . .	♂ N. America 1746
— <i>spectabilis</i> . . .	Chinese Apple . . .	♂ China 1780
— <i>japonica</i> . . .	Japan Quince . . .	♂ Japan 1796
— <i>Cydonia</i> . . .	Common Quince . . .	♂ Austria, bef. 1573
<i>Quercus Ilex</i> . . .	Evergreen Oak . . .	♂ Δ S. of Eur. b. 1581
— <i>Suber</i> . . .	Cork Tree . . .	♂ Δ S. of Eur. b. 1699
— <i>coccinea</i> . . .	Scarlet Oak . . .	♂ N. Amer. be. 1691
— <i>Prinus</i> . . .	Chesnut-leaved Oak . . .	♂ N. Amer. be. 1730
— <i>Berris</i> . . .	Turkey Oak . . .	♂ S. of Eur. bef. 1735
<i>Rhamnus Alaternus</i> . . .	Alaternus . . .	♂ Δ S. Eur. be. 1629
<i>Rhododendron hirsutum</i> . . .	. . .	♂ Δ Switzer. be. 1656
— <i>maximum</i> . . .	. . .	♂ Δ N. America 1736
— <i>ponticum</i> . . .	. . .	♂ Δ Gibraltar 1763
<i>Rhodora canadensis</i> . . .	. . .	♂ N. America 1767
<i>Rhus Coriaria</i> . . .	Elm leaved Sumach . . .	♂ S. of Eur. b. 1596
— <i>Toxicodendrum</i> . . .	Poison Oak . . .	♂ N. Amer. b. 1640
— <i>Cotinus</i> . . .	Venice Sumach . . .	♂ Italy, before 1656
<i>Ribes oxyacanthoides</i> . . .	Hawthorn Currant . . .	♂ Canada 1705

Robinia Pseudacacia . . .	Common Acacia, or Locust Tree	5 N. Amer, be. 1640
Rosa provincialis . . .	Provins Rose . . .	5 Italy, before 1596
— damascena . . .	Damask Rose . . .	5 S. France, be. 1573
— pendulina . . .	Rose without Thorn . . .	5 N. Amer. be. 1726
— muscosa . . .	Moss Rose . . .	5 before 1724
— indica . . .	China Rose . . .	5 China, abt. 1789
Rosmarinus officinalis . . .	Rosemary . . .	5 Δ S. of Eur. b. 1548
Rubus occidentalis . . .	Virginian Raspberry . . .	5 N. Amer. b. 1696
— odoratus . . .	Flowering Raspberry . . .	5 N. Amer. 1700
Ruscus Hypoglossum . . .	Butcher's Broom . . .	5 Δ Hungary, b. 1596
— racemosus . . .	Alexandrian Laurel . . .	5 Δ Portugal b. 1713
Salisburia adiantifolia . . .	Maiden-hair Tree . . .	5 Japan be. 1754
Salix baýlonica . . .	Weeping Willow . . .	5 Levant, bef. 1692
Satureia montana . . .	Winter Savory . . .	5 Δ S. France b. 1562
Sophora japonica . . .	. . . . .	5 Japan 1753
Spartium junceum . . .	Spanish Broom . . .	5 S. of Eur. be. 1548
Spiræa hypericifolia . . .	Hypericum frutex . . .	5 Canada, bef. 1640
Staphylea trifolia . . .	Bladder Nut . . .	5 Virginia, abt. 1640
Stuartia Malachodendron . . .	. . . . .	5 N. Amer. be. 1742
Styrax officinale . . .	Gum Storax . . .	5 Levant, be. 1597
Thea Bohea . . .	Tea Tree . . .	5 Δ China, abt. 1768
Thuja orientalis . . .	Chinese Arbor vitæ . . .	5 Δ Canada, be. 1752
— occidentalis . . .	American Arbor vitæ . . .	5 Δ Canada be. 1596
Tilia americana . . .	American Lime . . .	5 N. Amer. bef. 1752
Ulmus americana . . .	American Elm . . .	5 N. Amer. 1752
Vaccinium frondosum . . .	American Whortleberry . . .	5 N. Amer. be. 1761
Viburnum Tinus . . .	Laurestine . . .	5 Δ S. of Eur. b. 1596
— — lævigatum . . .	Paragua Tea . . .	5 Carolina, be. 1724
Vitex Agnus castus . . .	Chaste Tree . . .	5 Sicily, bef. 1570
Vitis vulpina . . .	Fox Grape . . .	5 Virginia, b. 1656
— hederacea . . .	Virginian Creeper . . .	5 N. Amer. b. 1629
Xanthorhiza apiifolia . . .	Yellow root . . .	5 Δ N. Amer. ab. 1766
Xanthoxylum clava Herculis . . .	Toothach Tree . . .	5 Carolina, be. 1739
Zizyphus vulgaris . . .	. . . . .	5 S. of Eur. b. 1640
— Paliurus . . .	Christ's Thorn . . .	5 Africa, bef. 1596

# ENGLISH NAMES.

Acacia, *see* Robinia  
 Alaternus, *see* Rhamnus  
 Alder, *see* Alnus  
 Alexandrian Laurel, *see* Ruscus  
 Allspice, *see* Calycanthus  
 Althæa frutex, *see* Hibiscus  
 Apricot, *see* Prunus  
 Arbor vitæ, *see* Thuja  
 Ash, *see* Fraxinus  
 Azarole, *see* Cratægus  
 Bastard Indigo, *see* Amorpha  
 Beech, *see* Fagus  
 Benjamin Tree, *see* Laurus  
 Bermudas Cedar, *see* Juniperus

Birch, *see* Betula  
 Birth wort, *see* Aristolochia  
 Bladder Senna, *see* Colutea  
 Bladder nut, *see* Staphylea  
 Box Thorn, *see* Lycium  
 Box, *see* Buxus  
 Broom, *see* Spartium  
 Buckwheat Tree, *see* Mylocaryum  
 Butcher's Broom, *see* Ruscus  
 Candleberry Myrtle, *see* Myrica  
 Cedar of Goa, *see* Cupressus  
 Cedar of Lebanon, *see* Pinus  
 Christ's Thorn, *see* Zizyphus  
 Chaste Tree, *see* Vitex

Carolina Allspice, *see* Calycanthus  
 Cork Tree, *see* Quercus  
 Cornelian Cherry, *see* Cornus  
 Currant, *see* Ribes  
 Custard Apple, *see* Annona  
 Cypress, *see* Cupressus  
 Date Plum, *see* Diospyros  
 Dog-wood, *see* Cornus  
 Elm, *see* Ulmus  
 Evergreen Oak, *see* Quercus  
 Evergreen Thorn, *see* Mespilus  
 Fig tree, *see* Ficus  
 Fir, *see* Pinus  
 Flowering Ash, *see* Fraxinus  
 Fringe Tree, *see* Chionanthus  
 Gold Plant, *see* Aucuba  
 Golden Chain, *see* Cytisus  
 Gum Tragacanth, *see* Astragalus  
 Gum Storax, *see* Styrax  
 Hardy Bonduc, *see* Gymnocladus  
 Hawthorn, *see* Cratægus  
 Hemlock Spruce, *see* Pinus  
 Hickery, *see* Juglans  
 Holly, *see* Ilex  
 Honeysuckle, *see* Lonicera  
 Horse Chesnut, *see* Æsculus  
 Hypericum frutex, *see* Spiræa  
 Hyssop, *see* Hyssopus  
 Jasmine, *see* Jasminum  
 Judas Tree, *see* Cercis  
 Kidney Bean Tree, *see* Glycine  
 Laburnum, *see* Cytisus  
 Larch, *see* Pinus  
 Laurestine, *see* Viburnum  
 Lavender, *see* Lavandula  
 Lime, *see* Tilia  
 Loblolly Bay, *see* Gordonia  
 Loquat, *see* Mespilus.  
 Lupine, *see* Lupinus  
 Maiden's-hair Tree, *see* Salisburia  
 Maple, *see* Acer  
 Mock Orange, *see* Philadelphus  
 Mountain Tea, *see* Gaultheria  
 Mulberry, *see* Morus  
 Nectarine, *see* Amygdalus  
 Nettle Tree, *see* Celtis

Oak, *see* Quercus  
 Oleaster, *see* Elæagnus  
 Osage Apple, *see* Maclura.  
 Paper Mulberry, *see* Broussonetia  
 Paragua Tea, *see* Viburnum  
 Passion Flower, *see* Passiflora  
 Peach, *see* Amygdalus  
 Pear, *see* Pyrus  
 Pigeon Berry, *see* Epigæa  
 Pine, *see* Pinus and Araucaria  
 Pishamin Plum, *see* Diospyros  
 Pistachia Tree, *see* Pistacia  
 Plane, *see* Platanus  
 Poison Oak, *see* Rhus  
 Pomegranate, *see* Punica  
 Poplar, *see* Populus  
 Privet, *see* Ligustrum  
 Raspberry, *see* Rubus  
 Rosemary, *see* Rosmarinus  
 Quince, *see* Pyrus  
 Rose, *see* Rosa  
 Sassafras Tree, *see* Laurus  
 Savin, *see* Juniperus  
 Savory, *see* Satureja  
 Sea Buckthorn, *see* Hippophae  
 Shrubby Trefoil, *see* Ptelea.  
 Snowdrop Tree, *see* Halesia  
 Sorrel Tree, *see* Andromeda  
 South Sea Tea, *see* Ilex  
 Spanish Broom, *see* Spartium  
 Spindle Tree, *see* Enonymus.  
 Spruce Fir, *see* Pinus  
 St. Peter's Wort, *see* Lonicera.  
 Strawberry Tree, *see* Arbutus  
 Sumach, *see* Rhus  
 Syringa, *see* Philadelphus  
 Trumpet Flower, *see* Bignonia  
 Tulip Tree, *see* Liriodendron  
 Walnut, *see* Juglans  
 Wax Tree, *see* Ligustrum  
 Whortle Berry, *see* Vaccinium  
 Winter Berry, *see* Prinos  
 Winter Savory, *see* Satureja  
 Witch Hazel, *see* Hamamelis  
 Yellow Root, *see* Zanthorrhiza

## XII. STATISTICS OF THE WORLD.

THERE are few parts of knowledge in which it is more difficult to attain even a partial accuracy than in Statistics ; particularly when our inquiries extend to places with which we are imperfectly acquainted. In many cases the official documents of a Government will enable us to obtain accurate statements of its population and its revenue ; but in other, and very numerous instances, our best information can only be derived from a comparison of the assertions, and even the conjectures of travellers. The French are in the habit of bestowing very minute attention upon this interesting branch of enquiry ; and some of their men of letters have devoted themselves to the preparation of Tables of reference, which may shew, from time to time, the progress and actual condition of the various States of the World. Amongst others, M. Adrien Balbi has applied himself for twenty years to these important labours, and he has recently published a Chart entitled “ Balance Politique du Globe, en 1828.” which is considered the most correct work of its kind, and which the author states is the result of a long period of the most laborious investigation. The late distinguished geographer, Malte-Brun, mentions this production, which was nearly completed before his death, as a most valuable abstract, of which he intended to insert a part in his concluding volume.

From this Chart of M. Balbi the following Table has been compiled. The geographical division is that of M. Walkenaer. The surface of the earth has been estimated at 148,522,000 square miles, of 60 to the equatorial degree (geographical miles), of which nearly three-fourth, or 110,489,000 square miles are covered by the Ocean and the interior Seas ;—the remainder, consisting of 37,673,000 square miles, forming the five parts of the world, called Europe, Asia, Africa, America, and Australasia (or Oceania). The square geographical mile has been retained in the following Tables, instead of the English square mile being adopted, as the former is used in most works on geography, particularly in those of France and Germany. The English square mile is about three-fourths of the area of the square geographical mile : that is, four English square miles are nearly equal to three geographical\*.

The particulars relating to each State are carried across two pages, and the figures prefixed to each are repeated in the last column of the right hand page, to assist the reference. For those States which have Colonial Possessions, a second line is given, shewing the total extent of their power :—Example 1.—“ *French Monarchy*, 154,000 square miles, 32,000,000 population”—gives the area and population of France itself ; but the second line, “ *Total of French Monarchy*,” includes the amount of France and all its possessions and dependencies. Wherever this mark ( ? ) is attached to a sum, or stands in the place of one, the information is considered questionable, or is not to be obtained.

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\* The Statistical Tables published in the Companion for 1828 were taken from “ *Almanach de Gotha*,” a publication of great circulation on the Continent. In the column of *square miles*, by which the relative size of each country is shown, the German Square Mile was used. Fifteen German miles are contained in a degree ; so that the German mile contains nearly  $4\frac{1}{2}$  English miles ; and one German *square mile* is about equal to 22 English square miles. This explanation was accidentally omitted in some copies of the Companion.





Capital Cities, with their Population.	Principal Religious Denominations.	Revenue. £ Sterling.	Debt. £ Sterling.	Armies.	Ships.	
Paris, 890,000 . .	Catholic, Calvinist .	39,560,000	184,960,000	231,560	323 *	1
Vienna, 300,000 .	Catholic, Greek, Calvinist, Lutheran .	14,000,000	58,400,000	271,400	72 †	2
Berlin, 220,000 .	Protestant, (Lutheran, Calvinist,) Catholic	8,600,000	29,067,200	162,600	1	3
Amsterdam, 201,000	Catholic, Calvinist, Lutheran	6,473,440	152,000,000	43,300	86 † ‡	4
Leipzig, 10,000 .	Calvinist, Catholic .	400,000	?	33,760	. .	5
Munich, 70,000 .	Catholic, Protestant	3,164,000	9,569,000	35,800	. .	6
Stuttgart, 32,000 .	Lutheran, Catholic .	950,440	2,260,000	13,950	. .	7
Hanover, 28,000 .	Lutheran, Catholic .	1,040,000	2,560,000	13,050	. .	8
Bresden, 70,000 .	Lutheran .	1,120,000	2,800,000	12,000	. .	9
Carlsruhe, 19,000 .	Catholic, Lutheran .	814,120	1,560,000	10,000	. .	10
Starmstadt, 20,000	Lutheran, Cath. Cal.	628,560	1,080,000	6,190	. .	11
Assel, 26,000 .	Protestant, Catholic	620,000	263,200	5,680	. .	12
Veimar, 10,000 .	Lutheran . .	196,520	651,640	2,100	. .	13
Magdeburg, 12,000 .	Lutheran . .	240,000	980,000	3,590	. .	14
St. Strelitz, 5,000 .	Lutheran . .	52,000	120,000	720	. .	15
Oldenburgh, 6,000	Lutheran, Catholic .	153,160	. .	1,650	. .	16
Viesbaden, 7,000 .	Protestant, Catholic	240,000	432,000	3,000	. .	17
Brunswick, 36,000	Lutheran . .	252,000	320,000	2,100	. .	18
Botha, 11,000 .	Lutheran . .	98,280	280,000	1,400	. .	19
Leiningen, 5,000 .	Lutheran . .	77,560	80,000	1,270	. .	20
Altenburgh, 10,000	Lutheran . .	61,040	100,000	1,030	. .	21
Dessau, 10,000 .	Calvinist, Lutheran	73,440	82,760	530	. .	22
Merseburgh, 5,000	Calvinist, Lutheran	46,560	82,760	370	. .	23
Goethen, 6,000 .	Calvinist, Lutheran	33,080	124,120	320	. .	24
Mudolstadt, 3,000 .	Lutheran . .	33,600	37,760	540	. .	25
Wondershausen, 3,000	Lutheran . .	20,680	12,200	450	. .	26
Leipzig, 6,000 . .	Lutheran . . .	14,480	20,630	200	. .	27
Schleitz, 5,000 .	Lutheran . . .	13,440	. .	280	. .	28
Biersdorf, 1,000 .	Lutheran . . .	24,840	72,400?	260	. .	29
Wetmold, 2,000 .	Calvinist . . .	50,680	72,400	690	. .	30
Stuckeburg, 2,000 .	Lutheran . . .	22,240	41,360	240	. .	31
Forbach, 2,000 .	Lutheran . . .	41,360	121,120	520	. .	32
Wismaringen, 800 .	Catholic . . .	31,040	155,160?	320	. .	33
Lechingen, 3,000 .	Catholic . . .	12,400	51,720	150	. .	34
Neuchtenstein, 700 .	Catholic . . .	140,000	312,000	55	. .	35
Stomburgh, 3,000 .	Calvinist, Lutheran	18,600	46,560	200	. .	36
Frankfort, 48,000 .	Lutheran . . .	78,600	827,440	470	. .	37
Bremen, 33,000 .	Lutheran, Calvinist	41,360	312,000	380	. .	38
Hamburg, 112,000	Lutheran . . .	224,000	1,880,000	1,300	. .	39
Lubeck, 22,000 .	Lutheran . . .	41,360	360,000	400	. .	40
Kniphausen, 100 .	Lutheran . . .	15,520	?	28	. .	41

† 3 ships of the line, 8 frigates, and 61 inferior vessels.

‡ 18 ships of the line, 20 frigates, and 50 inferior vessels.

STATES AND TITLES.		Surface in Geogra. Sq. Miles.	Population	Reigning Sovereign, or Head of Government.
WESTERN DIVISION.	SOUTHERN STATES.			
	42 Republic of Andorra (Spain) . . . . .	144	15,000	Magis. of the Republic
	43 Republic of San Marino . . . . .	17	7,000	2 Quarterly Chiefs
	44 Duchy of Massa . . . . .	71	29,000	Maria Beatrice, 1814 .
	45 Duchy of Modena . . . . .	1,500	350,000	Francis IV., 1814 .
	46 Principality of Monaco . . . . .	38	6,500	Honorius, 1919 . . .
	47 Duchy of Lucca . . . . .	312	143,000	Charles, 1824 . . .
	48 Duchy of Parma . . . . .	1,660	440,000	Maria Louisa, 1814 .
	49 Grand Duchy of Tuscany . . . . .	6,324	1,275,000	Leopold II., 1824 . .
	50 Kingdom of Sardinia . . . . .	21,000	4,300,000	Felix, 1821 . . .
	51 State of the Church . . . . .	13,000	2,590,000	Leo XII., 1823 . . .
	52 Kingdom of the Two Sicilies . . . . .	31,800	7,420,000	Francis I., 1825 . . .
	53 Spanish Monarchy . . . . .	137,400	13,900,000	Ferdinand VII. 1808 .
	Total of the Spanish Monarchy . . . . .	214,400	17,983,000	
	54 Portuguese Monarchy . . . . .	29,150	3,530,000	Maria II., 1828 . . .
	Total of the Portuguese Monarchy . . . . .	430,000	5,607,000	
EASTERN DIVISION.	NORTHERN STATES.			
	55 Monarchy of Sweden and Norway . . . . .	223,000	3,866,000	Charles XIV. 1818 .
	56 Danish Monarchy . . . . .	16,500	1,950,000	Frederic VI., 1808 .
	Total of the Danish Monarchy . . . . .	341,000	2,125,000	
	57 English Monarchy . . . . .	90,948	23,400,000	George IV., 1820 . .
	Total of the English Monarchy . . . . .	4,457,598	140,450,000	
	58 Russian Empire . . . . .	1,499,000	52,625,000	Nicholas I., 1826 . .
	Kingdom of Poland . . . . .	36,700	3,900,000	
	Total of the Russian Empire . . . . .	5,912,000	60,000,000	[Wodxicky, 1824 .
	59 Republic of Cracow . . . . .	373	114,000	Count Stanislaus, of
	60 Ottoman Empire . . . . .	155,000	9,500,000	Mahmoud II., 1808 .
	Total of the Ottoman Empire . . . . .	1,078,000	25,000,000	
	61 Republic of the Ionian Isles . . . . .	754	176,000	Prince Anthony Comuto (President).
ASIA.				
Surface 12,118,000 Geographical Sq. Miles.				
Population 390,000,000 Inhabitants. †				
62 Chinese Empire . . . . .	4,070,000	170,000,000	Tao Kouang, 1820 ‡	
63 Empire of Japan . . . . .	180,000	25,000,000	Bounoaw, 1804 . . .	
64 Empire of An-nam . . . . .	270,000†	14,000,000	Minh Mea, 1820 . . .	
65 Kingdom of Siam . . . . .	124,000†	3,000,000	Kroma Chiat, 1824 .	
66 Birman Empire . . . . .	140,000	3,500,000	Madou Tchen, 1818 .	
67 British Indian Empire . . . . .	849,650	114,430,000		
East India Company's Territory . . . . .	349,000	80,800,000	Lord William Bentinck	
East India Company's Dependencies . . . . .	485,000	32,800,000	[1827, Gov. Gen	
Island of Ceylon . . . . .	15,650	830,000		
68 Kingdom of Sindia . . . . .	29,760	4,000,000	Djunkadji Rao., 1827	
69 Kingdom of Nepaul . . . . .	40,000	2,500,000	Bickram Djah, 1816 .	
70 Confederation of the Sikhs . . . . .	66,000	5,500,000	Son of Rnnjit Sin., 1827	
71 Triumvirate of Sindh . . . . .	40,000	1,000,000	Son of Mir Gholam	
72 Kingdom of Cabaul . . . . .	172,000	6,500,000	[Ali, 181	
73 Confederation of the Beloutchis . . . . .	110,000†	2,000,000	Mahomet, 1795 . . .	
74 Kingdom of Herat (Eastern Korassan) . . . . .	50,000†	1,500,000		
75 Kingdom of Persia . . . . .	350,000	9,000,000	Feth Ali 'Schah, 1796.	
76 Khanate of Boukhara . . . . .	173,000	2,500,000	Mir Batyr, 1827 . .	
77 Khanate of Khiva . . . . .	145,000	800,000	Rhaman Kouli Khai	
78 Khanate of Khokhan . . . . .	100,000†	1,000,000†	Emir Khan [182	
79 Imanate of Yemen . . . . .	40,000†	2,500,000†		
80 Imanate of Mascate . . . . .	39,000†	1,600,000†	Bidon Ebn. Saaf, 1808	
81 Ottoman Asia . . . . .	556,000	12,500,000		
82 Russian Asia . . . . .	4,006,000	3,445,000		
83 Portuguese Asia . . . . .	3,700	500,000		
84 French Asia . . . . .	400	179,000		

\* 10 ships of the line, 16 frigates, 30 inferior.

† 12 ships, 13 frigates, 60 inferior.

‡ 4 ships of the line, 6 do. 37 do.

§ 4 do. 7 do. 18 do

Capital Cities, with their Population.	Principal Religions Denominations.	Revenue £ Sterling.	Debt £ Sterling.	Armies.	Ships.	
Andorra, 2,000 .	Catholic . . .	?	?	?	. .	42
San Marino, 4,000.	Catholic . . .	2,800	?	40	. .	43
Massa, 7,000 .	Catholic . . .	20,000	} 60,000?	100	. .	44
Modena, 27,000 .	Catholic . . .	140,000		1,680	. .	45
Monaco, 1,000 .	Catholic . . .	16,000	?	.	. .	46
Lucca, 22,000 .	Catholic . . .	76,000	?	800	. .	47
Parma, 30,000 .	Catholic . . .	181,000	180,000	1,320	. .	48
Florence, 80,000 .	Catholic . . .	680,000		4,000	. .	49
Turin, 114,000 .	Catholic . . .	2,600,000	4,000,000?	26,000	10	50
Rome, 154,000 .	Catholic . . .	1,200,000	24,000,000?	6,000	8?	51
Naples, 364,000 .	Catholic . . .	3,360,000	20,000,000?	30,000	27?	52
Madrid, 201,000 .	Catholic . . .	4,320,000?	160,000,000	50,000	56 *	53
Lisbon, 260,000 .	Catholic . . .	2,163,840	6,400,000	26,630	47 †	54
Stockholm, 78,000	Lutheran . . .	1,630,000	8,000,000	45,200	85 ‡	55
Copenhagen, 109,000	Lutheran . . .	1,600,000	10,800,000	38,820	29 §	56
London, 1,350,000	Protest. Episcopalian.	62,306,214	777,476,892	102,280	606	57
St. Petersburg [320,000?]	Pres. Catholic Greek, Catholic, Luth. Mahometan . . .	16,000,000	52,000,000	1,039,000	130 ¶	58
Cracow, 25,000 .	Catholic . . .	34,440	?	80		59
Constantinople [600,000?]	Greek, Mahometan . .	10,000,000	4,000,000	278,000	285 **	60
Corfu, 14,000 .	Greek . . .	146,240	?	1,200	?	61
Pekin, 1,300,000?	{ Buddhists, disci. of } { Confucius, &c. }	30,000,000?	. . {	914,000	?	62
Jeddo, 1,300,000?	Lintorist, Buddhist .	12,000,000	. . {	1,500,000 w	?	63
Phuxuan, 100,000?	Buddhist . . .	3,600,000	. .	120,000	?	64
Bangkok, 90,000?	Buddhist . . .	1,600,000?	. .	80,000	150?	65
New Ava, 50,000?	Buddhist . . .	1,800,000?	. .	80,000 w	?	66
Calcutta, 500,000?	Brah. Mah. Nanekist	21,089,440	39,000,000?	150,000 w	?	67
Ougein, 100,000?	Brahman, Mahometan	1,040,000	. .	20,000	. .	68
Katmandou, 12,000?	Brahman, Boud. Lam.	520,000	. .	17,000	. .	69
Amretsir, 40,000 .	Nanekist, Brah. Mah.	2,000,000	. .	250,000 w	. .	70
Heider Abad, 15000	Mahometan, Brahman	520,000	. .	50,000 w	. .	71
Cabaul 80,000 .	Mahometan, Brahman	1,800,000	. .	150,000 w	. .	72
Kelat, 20,000 .	Mahometan . . .	40,000	. .	150,000 w	. .	73
Herat, 100,000 .	Mahometan . . .	320,000?	. .	8,000	. .	74
Teheran, 150,000 .	Mahometan . . .	3,200,000	. .	80,000	. .	75
Boukhara, 80,000?	Mahometan . . .	480,000	. .	25,000	. .	76
Khiva, 10,000 .	Mahometan . . .	?	. .	100,000 w	. .	77
Khokhan, 60,000?	Mahometan . . .	?	. .	100,000 w	. .	78
Szanna, 20,000 .	Mahometan . . .	480,000?	. .	5,000?	. .	79
Mascate, 60,000 .	Mahometan . . .	160,000?	. .	1,000	34	80
Koutahich, 50,000.	Mah. Armenian, Greek	. .	. .	. .	. .	81
Tobolsk, 25,000 .	Greek, Mah. Fetichist	. .	. .	. .	. .	82
Goa, 18,000 .	Catholic . . .	. .	. .	. .	. .	83
Pondicherry, 40,000	Brahman, Catholic .	. .	. .	. .	. .	84

¶ 165 ships, 117 frigates, 324 inferior. ¶ 50 do. 30 do. 50 do. \*\* Before the Battle of Navarino.  
(a) This is an estimated increase upon the Returns of 1821.

STATES AND TITLES.	Surface in Geogra. Sq. Miles.	Population	Reigning Sovereign or Head of Government.
<b>AFRICA.</b>			
Surface 8,516,000 Geograph. Square Miles. Population 60,000,000 Inhabitants?			
85 Empire of Morocco . . . . .	130,000	4,500,000	Mulei Abderrahman, 1822
86 Algiers . . . . .	70,000	1,500,000	Houssan, 1818
87 State of Tunis . . . . .	40,000	1,800,000	Sidi Hassan, 1824
88 State of Tripoly . . . . .	208,000	660,000	Yousof, 1795
89 Kingdom of Tigre . . . . .	130,000	1,500,000?	
90 Kingdom of Amharra . . . . .	48,000?	1,000,000?	
91 Empire of Bornou . . . . .	100,000?	2,000,000?	Schumin el Kanemy
92 Empire of the Felatahs . . . . .	120,000?	3,000,000?	Bello . . . . .
93 Kingdom of Upper Bambarra . . . . .	50,000?	1,500,000?	
94 Republic of Fouta Toro . . . . .	15,000?	700,000?	
95 Empire of Ashantee . . . . .	100,000?	3,000,000?	
96 Kingdom of Dahomey . . . . .	40,000?	900,000?	
97 Kingdom of Benin . . . . .	63,000?	1,500,000?	
98 Kingdom of Changamera . . . . .	70,000?	840,000?	Changamera . . . . .
99 Kingdom of Madagascar . . . . .	100,000?	2,000,000?	Radama . . . . .
100 Ottoman Africa . . . . .	367,000	3,000,000	Mahomet-Ally, 1805
101 Portuguese Africa . . . . .	389,000	1,440,000	
102 English Africa . . . . .	91,000	270,000	
103 Spanish Africa . . . . .	2,430	208,000	
104 French Africa . . . . .	3,000?	135,000	
<b>AMERICA, or the New World.</b>			
Surface 11,016,000 Geograph. Square Miles. Population 39,000,000 Inhabitants.			
105 Empire of Brazil . . . . .	2,313,000	5,000,000	Don Pedro, 1822
106 United States of North America . . . . .	1,570,000	11,600,000	John Q. Adams, 1825 President
107 United States of Mexico . . . . .	1,242,000	7,500,000	Gnada. Victoria, 1825 P.
108 United States of Central America . . . . .	139,000	1,650,000	D. M. José Arce, 1825 P.
109 Republic of Columbia . . . . .	828,000	2,800,000	Simon Bolivar, 1826 Pr.
110 Republic of Peru . . . . .	373,000	1,700,000	José de Lamar, 1827 P.
111 Republic of Bolivia . . . . .	310,000?	1,300,000	Antonio José de Sucre, 1825 Pres. [V.-P.]
112 Republic of Chili . . . . .	129,000	1,400,000	Franc. Ant. Pinto, 1827.
113 United States of Rio de la Plata . . . . .	683,000	700,000	Manuel Dorrego, 1827 Gr.
114 Republic of Hayti . . . . .	22,100	950,000	Boyer, 1820 Pres.
115 Directorate of Paraguay . . . . .	67,000	250,000?	Francia, 1809, Director.
116 English America . . . . .	1,930,000?	2,290,000	
117 Spanish America . . . . .	35,400	1,240,000	
118 French America . . . . .	30,000?	240,000	
119 Danish America . . . . .	324,000?	110,000	
120 American Netherlands . . . . .	30,000?	114,000	
121 Russian America . . . . .	370,000?	50,000	
<b>AUSTRALASIA.</b>			
Surface 3,100,000 Geograph. Square Miles. Population 20,300,000 Inhabitants.			
122 Kingdom of Siak (Sumatra) . . . . .	20,000?	600,000?	
123 Kingdom of Acheen (Sumatra) . . . . .	16,600?	500,000?	
124 Kingdom of Borneo . . . . .	20,000?	260,000?	
125 Kingdom of Solou . . . . .	11,000?	300,000?	
126 Kingdom of Mindanao . . . . .	12,000?	360,000?	
127 Kingdom of Sandwich Islands . . . . .	5,100	130,000	Kaukianti, 1824
128 Java, Sumatra, &c. (Dutch) . . . . .	203,000	9,360,000	
129 Philippine Islands, &c. (Spanish) . . . . .	39,000	2,640,000	
130 Australia, or New Holland . . . . .	1,496,000	60,000	
131 Island of Timor, part of, (Portuguese) . . . . .	8,000	137,000	

Capital Cities, with their Population.	Principal Religious Denominations.	Revenue. £ Sterling.	Debt. £ Sterling.	Armies.	Ships.	
Mequinez, 70,000 .	Mahometan . . . .	880,000	. . . .	36,000	15	85
Algiers, 50,000 .	Mahometan . . . .	160,000	. . . .	20,000	25	86
Tunis, 100,000 .	Mahometan . . . .	280,000	. . . .	6,000	18	87
Tripoli, 15,000 .	Mahometan . . . .	80,000	. . . .	4,000	17	88
Chelicut, 8,000? .	Copt . . . . .	. . . . .	. . . . .	43,000	. . . .	89
Gondar, 40,000? .	Copt . . . . .	. . . . .	. . . . .	25,000	. . . .	90
Bornou, 30,000 .	Fetichist, Mahometan	. . . . .	. . . . .	70,000	. . . .	91
Sakkaton, 80,000? .	Fetichist, Mahometan	. . . . .	. . . . .	100,000	. . . .	92
Sego, 30,000 .	Mahometan, Fetichist	. . . . .	. . . . .	. . . . .	. . . .	93
Tjiloga?, 4,000? .	Mahometan, Fetichist	. . . . .	. . . . .	. . . . .	. . . .	94
Coumassie, 15,000 .	Fetichist . . . . .	. . . . .	. . . . .	100,000	. . . .	95
Abomey, 24,000 .	Fetichist . . . . .	. . . . .	. . . . .	31,000	. . . .	96
Benin, 60,000? .	Fetichist . . . . .	. . . . .	. . . . .	50,000	. . . .	97
Zimbaoe, . . . .	Fetichist . . . . .	. . . . .	. . . . .	30,000	. . . .	98
Emirne, 30,000? .	Fetichist, Mahometan	. . . . .	. . . . .	31,000	. . . .	99
Cairo, 260,000 .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	100
	Fetichist, Catholic	. . . . .	. . . . .	. . . . .	. . . .	101
The Cape, 18,000 .	Calvinist, Cath. Ch. of	. . . . .	. . . . .	. . . . .	. . . .	102
S. Paolo de Loanda	England, Fetichist	. . . . .	. . . . .	. . . . .	. . . .	103
Centa, 7,000 .	Catholic . . . . .	. . . . .	. . . . .	. . . . .	. . . .	104
Fort St Louis, 10,000	Mahometan, Catholic	. . . . .	. . . . .	. . . . .	. . . .	105
[140,000? .						
Rio de Janeiro, .	Catholic . . . . .	2,500,000	9,320,000	30,000	101	106
Washington, 12,000? .	Congregational, Pres.	5,539,600	15,836,000	5,779	68 *	107
	Epis. Luth. Cat. Meth.					
Mexico, 130,000 .	Catholic . . . . .	2,950,280	20,310,000	22,750	16	108
New Guatem. 40,000	Catholic . . . . .	400,000	380,000	3,500	2	109
Bogota, 30,000 .	Catholic . . . . .	1,712,000	9,160,000	32,370	17	110
Lima, 80,000 .	Catholic . . . . .	1,200,000	5,899,520	7,500	7	111
La Plata, 25,000? .	Catholic . . . . .	440,000	640,000	?	. . . .	112
Santiago, 60,000 .	Catholic . . . . .	600,000	6,440,000	8,000	6	113
Buenos Ayres, 80,000	Catholic . . . . .	600,000	5,360,000	10,000	16	114
Port-au-Prin. 30,000	Catholic . . . . .	1,200,000	6,000,000	45,000	6	115
Assumption, 12,000? .	Catholic . . . . .	200,000	. . . . .	5,000	2	116
Quebec, 22,000 .	Ch. of Eng. Cal. Cath.	. . . . .	. . . . .	. . . . .	. . . .	117
Havannah, 130,000	Catholic . . . . .	. . . . .	. . . . .	. . . . .	. . . .	118
Fort-Royal, 9,000 .	Catholic . . . . .	. . . . .	. . . . .	. . . . .	. . . .	119
Reikiavik, 500 .	Lutheran . . . . .	. . . . .	. . . . .	. . . . .	. . . .	120
Paramaribo, 20,000	Calvinist . . . . .	. . . . .	. . . . .	. . . . .	. . . .	121
St. Paul, 600 . .	Fetichist . . . . .	. . . . .	. . . . .	. . . . .	. . . .	122
Siak, 8000? [15,000? .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	123
Telosancaonay, .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	124
Borneo, 15,000? .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	125
Bevan, 6,000 . .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	126
Selangau, 10,000 .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	127
Hanarura, 6,000? .	Fetichist, Methodist	. . . . .	. . . . .	. . . . .	11?	128
Batavia, 46,000 .	Mahometan . . . .	. . . . .	. . . . .	. . . . .	. . . .	129
Manilla, 140,000 .	Catholic, Mahometan	. . . . .	. . . . .	. . . . .	. . . .	130
Sydney, 10,000 .	Ch. of Eng. Pres. Cath.	. . . . .	. . . . .	. . . . .	. . . .	131
Dille, 2,000 . .	Catholic, Fetichist	. . . . .	. . . . .	. . . . .	. . . .	132

(a) Washington is the seat of Government in the United States, and is therefore the nominal Capital. The Capitals of several of the individual States are superior in population and importance.

## XIII. INCREASE OF INHABITANTS OF EUROPE.

*(Abridged from Mr. Jacob's Corn Report.)*

## RUSSIA.

THE accounts of the population of Russia, which are the most to be relied upon, comprehend only a part (though the greatest part) of the inhabitants of that extended empire. The Synod of the Orthodox Greek Church publish each year the number of Marriages, Births, and Deaths, in the year preceding. The following is a comparison of those lists for the years 1820 and 1826—at which former year the empire had attained its present extended limits:—

Year.	Marriages.	Births.	Deaths.	Increase.
1820	317,805	1,570,399	917,680	652,719
1826	384,787	1,645,023	1,194,637	450,386

It is difficult to account for the lesser increase in 1826 than in 1820, unless it be attributed to the great difference in fertility between the respective years. The years 1819 and 1820 were highly productive in the east of Europe—that of 1825 rather less so—and that of 1826 was in all the sandy districts, from the great drought that prevailed, very deficient. These years, however, may be taken as the standard of annual increase: thus the excess of births over deaths consists of 551,552 souls; this comprehends only the increase in the greater religious sect over whom the Synod presides. When the whole population in 1806 amounted to 41,252,000 persons, the excess of births over deaths, as published by the Synod, was 542,701. Since that year, countries have been added to the empire whose inhabitants did not profess the Orthodox Greek Religion, and are therefore not noticed in the annual reports of the Synod. Amongst these may be classed Finland, whose inhabitants are Lutherans; Bialystock, where they are either Catholics, or Heterodox Greeks; Caucasus provinces, where the majority are Mahomedans and Jews; and Poland, where they are mostly Catholics and Jews;—the proportion which those of the dissident sects bear to the Orthodox Church is estimated as 2 to 7. At this ratio, the annual increase of the population of Russia must be at the rate of 697,758 persons, exclusive of the inhabitants of the Asiatic provinces of Russia, who bear to those in the European provinces the proportion of 2 to 11. Thus, for the annual increase of the whole empire of 697,758 persons, must be subtracted two-elevenths, or 98,673, leaving, as yearly augmentation, by the excess of births over deaths in European Russia, 598,085. Thus, from 1815 to the present time, averaging 600,000 for twelve years (being a few months short of the real time), we may, without fear of any material error, assume the population of European Russia to have increased about seven millions. In Russia, the increase seems to depend less on the increased number of births than on the more extended length of life. In the returns of the Synod, the deaths of persons above a hundred years old appear to have been, in the year

1806	.	.	.	.	.	293
1810	.	.	.	.	.	350
1816	.	.	.	.	.	689
1820	.	.	.	.	.	807
1826	.	.	.	.	.	1054

PRUSSIA.

By the official papers of Prussia, whose accuracy in its statistical communications cannot be surpassed, we learn that in the ten years from 1817 to 1827, the increase amounted to 1,849,561, at which rate the inhabitants would double themselves in little more than thirty-six years. This is the most extraordinary instance of increase in any old-settled country.

SWEDEN, DENMARK, AND NORWAY.

In Sweden, Denmark, and Norway, population is making rapid advances. In a brief account respecting the increase in Sweden, extracted from the "*Révue Encyclopédique*" for March, 1825, the excess of births above deaths, in 1823, is stated to be 42,205.—Denmark has increased at the rate of two per cent., and Sweden and Norway may be estimated at two thirds of that proportion. Assuming this estimate, the increase in Denmark being taken at 20,000, and that of Sweden and Norway at 40,000, for each year, from the peace of 1815 to the end of 1827, the increase will have been 720,000. (The other dominions of Denmark will be viewed as a part of Germany.)

AUSTRIA.

In determining the increase of the population in the dominions of Austria, there is some difficulty, arising from the different periods when the number of inhabitants was ascertained in the several provinces. Thus, in the archduchy of Austria, in the provinces on the Ens and the Steyermark, the census is dated from 1815—in Illyria, from 1818—in the Tyrol, from 1806—in Galicia and Moravia, from 1818—in Hungary, from 1794—in Siebenburgen, from 1794—in the military frontier, from 1815—in Temeswar, from 1814—and in the kingdom of Venetian Lombardy, from 1815. The aggregate number taken from these returns, as enumerated by Baron Lichtenstein, in 1820, amounted to 29,699,724 individuals. According to the local returns, as published by the Geographical Board of Vienna in 1822, edited by Colonel Fallon, and framed in the preceding year, the rate of the increase of population appears to be as follows:—

In Hungary and Siebenburgen . . . . .	1 $\frac{4.5}{100}$ annually.
In Austria Proper, the Steyermark, and Siebenburgen . . . . .	2 $\frac{3.5}{100}$ Do.
Bohemia, Galicia, Illyria, and Moravia . . . . .	2 $\frac{3.2}{100}$ Do.
Dalmatia, Tyrol, and Venetian Lombardy . . . . .	2 $\frac{1.6}{100}$ Do.

This statement gives as a result an increase, in twelve years, on the population of 1815, calculated at 27,000,000, of more than twenty-seven per cent., in fact, nearly 7,000,000. Different authorities agree, up to the year 1821, in a rate of increase which, if continued to 1828, would make that increase more than 7,000,000.

## GERMANY.

Those parts of Germany which are comprehended in neither the Austrian empire nor the Prussian kingdom, contained, at the time of the Congress of Vienna, a population of 13,600,000. By exact returns, for a series of years, from each Province in Hanover, is shown an increase, in ten years, at the rate of twelve per cent., or somewhat more than fourteen per cent. in the twelve years since the peace. By official statements we learn the inhabitants of Bavaria amounted, in 1821, to 3,743,330, and in 1826, to 4,301,004. An official account from the Grand Duchy of Baden, states the population, in 1822, as 1,090,910, and in 1826, as 1,145,357, shewing an increase at the rate of one and forty-eight one-hundredths annually. From the best works describing the States of Saxony, Wirtemberg, Hesse Cassel, Hesse Darmstadt, Nassau, and the smaller sovereignties, and from oral information, the increase of population in these states may be rated much below that of Austria and of Prussia, and nearer that of Baden; taking it at the rate of seventeen and a half per cent. in the twelve years since the peace, the increase in the portions of Germany under consideration may be assumed at 2,400,000 at the present time.

## SWITZERLAND.

By a census taken in Switzerland, in 1821, the inhabitants were found to be 1,783,231; and in 1827 they were 2,037,030, shewing an increase in six years of 253,799. The whole augmentation, during the twelve years of peace, may therefore be estimated at 500,000.

## NETHERLANDS.

In the kingdom of the Netherlands a census is taken every five years, and at the end of each intermediate year the births are added and the deaths subtracted, which is adjusted by the enumerations of the fifth years. By an account printed for the information of the legislature, it is seen that the population, which Jan. 1, 1815, was 5,424,502, had advanced by Jan. 1, 1825, to 6,013,478; and adding for the three years to the Jan. 1, 1828, at the same rate, the increase since the peace is shown to be 760,000.

## FRANCE.

The state of the population of France, according to a recent work by Baron Dupin, in point of increase, has been slower than in other parts of Europe. According to his statement, France contains 31,000,000 of inhabitants, who increase annually at the rate of 6,536 for each million: this would show an annual augmentation of 200,000, or in the twelve years since the peace, of 3,400,000 persons.

## GREAT BRITAIN AND IRELAND.

The population of Great Britain, from data afforded by the three decennial enumerations of 1801, 1811, and 1821, may be taken to have increased at the rate of 200,000 in each year, from 1815 to 1827; or in the period since the peace, to 2,400,000. In 1821, according to the government estimate, the population of Ireland



amounted to 6,800,000, since which, it is believed, the increase has been equal to the proportion which has been ascertained to have taken place in Great Britain—the one island, in 1821, containing 14,391,631 inhabitants, and the other 6,801,827. Thus the increase of the United Kingdom, since 1815, appears to be 3,500,000.

#### ITALY.

The estimate of the increase of inhabitants in Northern Italy is comprehended in that of the dominions of Austria, as far as the territories of that empire extend in it. In the dominions of the King of Naples, according to the official statements (to be found in Dupin) in 1817, the population amounted to 6,828,558. Dupin gives for the annual rate of increase 11,111 for each million, which would amount to 75,850 yearly, or for the twelve years since 1815, to 900,000. The middle of Italy, comprehending Sardinia, the Papedom, Tuscany, Modena, Parma, Lucca, and the Islands, contained, in 1817, 8,859,000 inhabitants. The rate of increase in those states has probably corresponded with that of Naples, consequently they have received an augmentation of 1,200,000.

#### SPAIN.

By Ancillon's work, published in 1809, the population of Spain is shown to be increasing, and, notwithstanding the internal disastrous occurrences in that country, it is more than probable some slight increase takes place.

#### PORTUGAL.

According to Balbi, in his "*Essai Statistique sur le R. de Portugal et d'Algarve*," published in 1822, a progress appears up to that period. The lists are very imperfect, but it appears that in the years 1815, 16, 17, 18, 19, the excess of births above deaths, and the proportion of both to the whole number of the people, is such as to show a great but uncertain rate of increase.

#### TURKEY IN EUROPE.

Of the population of Turkey nothing is known. Its European territory is stated to contain 7,000,000 of inhabitants, no improbable estimation, considering what is known of Portugal; it is rational to presume that this country has, in fifteen years, increased five per cent., or one million.

From the statement here exhibited, it appears that the inhabitants of Europe have, within the period that has elapsed since the general peace, been augmented by the number of twenty-eight or twenty-nine millions.

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### XIV. POPULATION OF CHINA.

The subjoined table of the population of China, the result of the last census (1790) of that people, is given in the *Biblioteca Italiana*, No. CXL., August 1827, by Signor Martucci, who is recently returned from Canton, where he had resided nearly three years.

## Population of China.

PROVINCES.	INHABITANTS.
Hing King, or Seing King, otherwise the whole } territory of Mauciao . . . . . }	486,643
King See, Ci-le, or Pi-ci-le . . . . .	3,504,038
Keang-su or Kiang-nan . . . . .	28,967,235
Gau-vuy . . . . .	1,438,023
Scian-se . . . . .	1,860,816
Scian-tung . . . . .	25,447,633
Honan . . . . .	2,662,969
Scien-se . . . . .	257,704
Kan-su . . . . .	340,086
Ce-keang . . . . .	18,975,099
Keang-se . . . . .	5,922,160
Hupi . . . . .	24,604,369
Hu-nan . . . . .	9,098,010
Sze-ciuen . . . . .	7,789,782
Fo-kin . . . . .	1,684,523
Kuang-tung . . . . .	1,491,271
Kuang-se . . . . .	2,569,518
Yu-nan . . . . .	3,083,459
Kuci-ciao . . . . .	2,941,391
TOTAL	143,124,734

This statement corresponds sufficiently with the report of our countryman, Mr. Thomas, published in several European journals, who classed the population of China thus:—

Inhabitants of the Terra Firma . . . . .	143,000,000
Dwellers on the Water . . . . .	2,000,000
Persons in civil Offices . . . . .	9,611
Military Officers . . . . .	7,552
The Army—Infantry . . . . .	822,000
Cavalry . . . . .	400,000
Followers of the Army . . . . .	31,000
	146,270,163

On the other hand, this total amount of the Chinese population differs widely from that furnished by Guthrie, on the authority of the statement delivered to Lord Macartney, and which gives 333,000,000 as the entire population of the Chinese empire.

In speaking, as is so generally done, of the antiquity of the Chinese empire, we constantly commit a mistake by applying its present extent to past times. Martucci contends, and confirms his opinion by various historical monuments, that the territory which now constitutes China anciently formed as many as forty-one independent kingdoms, which, in the course of ages, have been united into one great monarchy, the existence of which, as such, cannot claim a higher antiquity than five centuries. Thus in the thirteenth century, in the time of Marco Polo and the Mogul conquest, the territory now forming China had not a name common to the whole, as at this day, but was divided into two grand monarchies; the one northern, and called Catai or Kitay (Cathay), and the other southern, and named Mangi, or Maha-Tchin. This last, when annexed to the empire by the conquests of Kubla Khan, in which Marco Polo assisted, was distributed into nine kingdoms or grand governments, and then lost its collective name of Mangi or Maha-Tchin.

## XV. CITIES, BOROUGHS, AND TOWNS,

IN GREAT BRITAIN AND IRELAND, the Population of each of which exceeds 5000. (From the Returns of 1821.)

\* \* \* In the following Table, those places only are given which are distinguished as Cities, Boroughs, and Towns, in the Population Returns. Many Parishes, particularly in the Manufacturing Districts, have considerably more than 5000 inhabitants each; but their population is scattered, and therefore they do not properly come within this list. Those numbers only are given which are distinguished in the official returns as belonging to the part described as the City, Borough, or Town. London is an exception to the rule; the particulars of the population of the Metropolis will be found in the Companion for 1828, page 86.

ENGLAND.		
Abingdon, Berks . . . . .	5,137	Chorley, Lancashire . . . . . 7,315
Alnwick, Northumberland . . . . .	5,927	Colchester, Essex . . . . . 14,016
Ashton-under-Lyne, Lancashire . . . . .	9,222	Colne, Lancashire . . . . . 7,274
Barnsley, York, (W. Riding) . . . . .	8,284	Congleton, Chester . . . . . 6,405
Barnstaple, Devon. . . . .	5,079	Coventry, Warwick . . . . . 21,242
Bath, Somerset. . . . .	36,811	Crediton, Devon. . . . . 5,515
Bedford . . . . .	5,466	Croydon, Surrey . . . . . 9,254
Belper, Derby. . . . .	7,235	Darlington, Durham . . . . . 5,750
Berwick-on-Tweed, Northumberland . . . . .	8,723	Deal, Kent . . . . . 6,811
Beverley, with its Liberties, York, (East Riding) . . . . .	7,503	Deptford, Kent . . . . . 19,862
Bingley, York, (West Riding) . . . . .	6,176	Derby, Town of . . . . . 17,423
Birmingham, with Aston and Edgebaston, Warwick . . . . .	106,722	Dewsbury, York, (West Riding) . . . . . 6,380
Blackburn, Lancashire . . . . .	21,940	Doncaster, York, (West Riding) . . . . . 8,544
Bolton, (Great,) Lancashire . . . . .	22,037	Dover, Kent . . . . . 10,327
Boston, Lincoln. . . . .	10,373	Dudley, Worcester . . . . . 18,211
Bradford, York, (West Riding) . . . . .	13,064	Durham, City of . . . . . 9,822
Bridgewater, Somerset . . . . .	6,155	Ely, Cambridge . . . . . 5,079
Brighton, Sussex . . . . .	24,429	Enfield, Middlesex . . . . . 8,227
Bristol, Gloucester and Somerset . . . . .	87,779	Exeter, Devon . . . . . 23,479
Bromsgrove, Worcester . . . . .	7,519	Falmouth, Cornwall . . . . . 6,374
Burnley, Lancashire . . . . .	6,378	Farnham, Surrey . . . . . 5,413
Burslem, Stafford . . . . .	9,699	Frome, Somerset . . . . . 12,411
Bury, Lancashire . . . . .	10,583	Gainsborough, Lincoln . . . . . 6,761
Bury St. Edmund's, Suffolk . . . . .	9,999	Gloucester, City of . . . . . 9,744
Cambridge . . . . .	14,142	Gosport, Southampton . . . . . 6,184
Canterbury, Kent . . . . .	12,745	Grantham, Lincoln . . . . . 9,394
Carlisle, Cumberland . . . . .	15,476	Greenwich, Kent . . . . . 20,712
Chatham, Kent . . . . .	15,268	Halifax, York, (West Riding) . . . . . 112,628
Cheltenham, Gloucester . . . . .	13,396	Hanley and Shelton, Stafford . . . . . 12,947
Chesham, Bucks . . . . .	5,032	Haslingden, Lancashire . . . . . 6,595
Chester, City of . . . . .	19,949	Hastings, Sussex . . . . . 5,085
Chesterfield, Derby . . . . .	5,077	Hereford, City of . . . . . 9,090
Chichester, Sussex . . . . .	7,362	Hinckley, Leicester . . . . . 6,706
		Huddersfield, (West Riding) . . . . . 13,284
		Hull, York, (East Riding) . . . . . 44,924
		Ipswich, Suffolk . . . . . 17,186
		Keighley, York, (W. Riding) . . . . . 9,223
		Kendal, Westmoreland . . . . . 8,984

Kidderminster, Worcester	10,709
Knaresborough, York, (West Riding)	5,283
Lancaster, Lancashire	10,144
Leeds, York, (West Riding)	83,796
Leicester	30,125
Lewes, Sussex	7,083
Lichfield, Stafford	6,075
Lincoln	10,367
Liverpool, Lancashire	142,141
London, with its dependencies	1,225,694
Longton and Lane End, Stafford	7,100
Loughborough, Leicester	7,365
Louth, Lincoln	6,012
Lynn Regis, Norfolk	12,253
Macclesfield, Chester	17,746
Madeley, Salop	5,379
Maidstone, Kent	12,503
Manchester, with Salford, Ardwick, Charlton Row, Cheetham Hulme, Lancashire	149,756
Mansfield, Nottingham	7,861
Margate, Kent	7,843
Middleton, Lancashire	5,809
Newark, Nottingham	8,084
Newbury, Berks	5,347
Newcastle - on - Tyne, with Gateshead	46,948
Newcastle-under-Lyne, Stafford	7,031
Northampton	10,793
Norwich, Norfolk	50,288
Nottingham, Town of	40,415
Nuneaton, Warwick	6,610
Oldham cum Prestwich, Lancashire	52,510
Oxford, City and University	16,364
Penrith, Cumberland	5,385
Penzance, Cornwall	5,224
Plymouth, Devon	61,212
Poole, Dorset	6,390
Portsmouth and Portsea, Southampton	42,054
Preston, Lancashire	24,575
Ramsgate, Kent	6,031
Reading, Berks	12,867
Redruth, Cornwall	6,607
Rochdale, Lancashire and York, (West Riding)	11,516
Rochester, Kent	9,309
Salisbury, Wilts	8,763
Scarborough, York, (N. Riding)	8,533
Sheffield, York, (West Riding)	42,157
Shepton Mallett, Somerset	5,021

Shields, N., Northumberland	8,205
Shields, South, Durham	8,885
Shrewsbury, Salop	19,602
Southampton	13,353
Spalding, Lincoln	5,207
Stafford	5,736
Stamford, Lincoln	5,059
St. Austle, Cornwall	6,175
Stockport, Chester	33,356
Stockton-on-Tees, Durham	5,006
Stourbridge, Worcester	5,090
Stroud, Gloucester	7,097
Sunderland, Durham	14,725
Taunton, Somerset	8,534
Tavistock, Devon	5,483
Tiverton, Devon	6,712
Trowbridge, Wilts	9,545
Tunbridge, Kent	7,406
Wakefield, York, (W. Riding)	10,764
Walsall, Stafford	11,914
Warminster, Wilts	5,612
Warrington, Lancashire	13,570
Warwick	8,235
Wednesbury, Stafford	6,471
Wellington, Salop	8,390
Wells, Somerset	5,888
Weymouth and Melcombe Regis, Dorset	6,622
Whitby, York, (North Riding)	8,697
Whitehaven, Cumberland	12,438
Wigan, Lancashire	17,716
Winchester, Southampton	7,739
Windsor, Berks	5,693
Wirksworth, Derby	6,318
Wisbeach, St. Peter's, Cambridge	6,515
Wolverhampton, Stafford	18,380
Woolwich, Kent	17,008
Worcester, City of	17,023
Workington, Cumberland	6,439
Wotton-under-Edge, Gloucester	5,004
Yarmouth, Great, Norfolk	18,040
York	20,787

## WALES.

Carmarthen	8,906
Swansea, Glamorgan	8,309
Holywell, Flint	10,253

## SCOTLAND.

Aberdeen, Old and New	44,796
Abroath, Forfar	5,817

Alloa, Clackmannan . . . . .	5,577	IRELAND.	
Ayr . . . . .	7,455	Armagh . . . . .	8,493
Brechin, Forfar . . . . .	5,906	Athlone, Westmeath . . . . .	7,543
Campbletown, Argyle . . . . .	6,445	Bandon, Cork . . . . .	10,179
Cupar, Fife . . . . .	5,892	Belfast, Antrim . . . . .	37,277
Dumfries . . . . .	11,052	Birr, King's County . . . . .	5,406
Dunbar, Haddington . . . . .	5,272	Carlow . . . . .	8,035
Dundee, Forfar . . . . .	30,575	Carrickfergus, Antrim . . . . .	8,023
Dunfermline, Fife . . . . .	13,681	Carrick-on-Suir, Tipperary . . . . .	7,466
Edinburgh . . . . .	138,235	Cashel, Tipperary . . . . .	5,974
Elgin . . . . .	5,308	Castlebar, Mayo . . . . .	5,404
Falkirk, Stirling . . . . .	11,536	Clonmell, Tipperary and Waterford . . . . .	15,290
Forfar . . . . .	5,897	Coleraine, Derry . . . . .	9,639
Glasgow, Lanark . . . . .	147,043	Cork . . . . .	100,658
Greenock, Renfrew . . . . .	22,086	Cove, Cork . . . . .	6,508
Haddington . . . . .	5,255	Dublin . . . . .	227,335
Hamilton, Lanark . . . . .	7,613	Dundalk, Louth . . . . .	9,256
Inverness . . . . .	12,264	Dungannon, Waterford . . . . .	5,105
Jedburgh, Roxburgh . . . . .	5,251	Ennis, Clare . . . . .	6,701
Irvine, Ayr . . . . .	7,007	Fermoy, Cork . . . . .	6,702
Kirriemuir, Forfar . . . . .	5,056	Galway . . . . .	27,775
Kilmarnock, Ayr . . . . .	12,769	Kilkenny . . . . .	23,230
Lanark . . . . .	7,085	Kinsale, Cork . . . . .	7,068
Montrose, Forfar . . . . .	10,338	Limerick . . . . .	59,045
Ninians, St. Stirling . . . . .	8,274	Londonderry, Derry . . . . .	16,970
Paisley, including Abbey Parish, Renfrew . . . . .	47,003	Newry, Down . . . . .	7,470
Peterhead, Aberdeen . . . . .	6,313	Roscrea, Tipperary . . . . .	5,239
Perth . . . . .	19,068	Sligo . . . . .	9,283
Port Glasgow, Renfrew . . . . .	5,262	Tullamore, King's County . . . . .	5,517
Stirling . . . . .	7,113	Waterford . . . . .	28,679
Wick, Caithness . . . . .	6,713	Wexford . . . . .	11,600

\*\*\* It has been found impossible to distinguish the town population from the landward parts of the parishes in Scotland. Those towns, therefore, in the above list, comprise a larger proportion than they actually contain, as compared with those of England and Scotland.

## XVI. HIGHLAND ROADS.

IN the last session of parliament a very detailed report was presented by the Commissioners of Highland Roads and Bridges. This report enables us, with reference to other authorities, to trace the progress of this great work to the present time.

The military roads in the Highland were commenced in 1732, and in 1745 they afforded a communication from Stirling to Inverness and from Inverness to Fort William. The soldiers stationed in the Highlands during the Rebellion of 1745 were employed as labourers; and military roads, to the extent of about 750 miles, were successively laid out.

In March, 1799, Colonel Anstruther, superintendent of the military roads in the Highlands of Scotland, in a memorial to the Lords of the Treasury relative to these roads stated, that "they passed through the wildest and most mountainous part of the Highlands of Scotland, where the people were poor, and the country thinly inhabited, and totally unable to keep in repair either the roads or bridges by statute labour, or any other means." The

district to which this observation referred was situated more immediately in contact with the low countries—the military roads extending no farther northward than the Murray Frith, and the fortresses along the Caledonian glen, and the country beyond, comprising the counties of Ross, Cromarty, Sutherland, and Caithness, with the greater part of Invernesshire, and the whole of the Western Islands, being without any road whatever. The internal communication was attended with the utmost difficulty and danger; and to such a degree did the want of safe and easy intercourse between the northern counties affect even the administration of justice, that until of late years the counties of Sutherland and Caithness were not required to return jurors to the northern circuit at Inverness.

In 1802, the state of the Highlands of Scotland claimed the attention of government, and after receiving surveys, and reports, parliament determined to defray one half the expense of constructing the roads and bridges which it was deemed expedient to establish immediately, for the purpose of facilitating commercial communication; and commissioners were appointed to superintend the application of the funds granted by virtue of this act of the legislature, the 43d Geo. III.

The inhabitants of these remote regions soon experienced the advantage of the works authorised by parliament. In 1804 the county of Inverness obtained permission to tax itself, in order to reimburse the land-owners, who had advanced funds to supply the loans necessary for the establishment of the roads and bridges. In the two following years the other counties imitated this example, and the improvements soon extended over 500 square miles.

In the autumn of 1827, Lord Colchester, one of the commissioners, visited Scotland. Mr. Mitchell, the engineer employed in a correspondence with his lordship, in January, 1828, furnished him with a comprehensive account of the various improvements which have been effected in the roads of the Highlands. Of the present extent of these roads, the following is a summary:—

The parliamentary and military roads are divided into six districts.

1st. The Argyleshire District, consisting of 180½ miles. The expense of annual repairs is 1171*l.* 2*s.* 6*d.*

2nd. Badenoch District, consisting of 202½ miles. Annual expense, 1443*l.* 7*s.* 9*d.*

3rd. Lochabar District, consisting of 256 miles. Annual expense, 1223*l.* 8*s.* 1*d.*

4th. Skye District, consisting of 172½ miles. Annual expense, 810*l.* 6*s.*

5th. Rosshire District, consisting of 209½ miles. Annual expense, 1424*l.* 1*s.* 5*d.*

6th.—Caithness and Sutherland District, consisting of 149½ miles. Annual expense, 1277*l.* 18*s.* In addition to the Parliamentary Roads in this division, by the exertions of the Marquess of Stafford, the county of Sutherland has been intersected with numerous cross-roads, highly beneficial to the different districts through which they run, extending to more than 300 miles.

# XVII. RENTALS OF THE COUNTY OF MIDDLESEX.

Rentals of the several Parishes in the County, ascertained from Returns made pursuant to Act of Parliament.

## OSSULSTON HUNDRED.

Westminster Division:—	
St. Marg. and St. John, West.	£129,032
St. Martin	191,316
St. George, Hanover Square	485,576
St. James, Westminster	222,616
St. Mary-le-Strand	4,484
St. Clement Danes	41,044
St. Paul, Covent Garden	41,860
St. Ann, Westminster	72,840

Holborn Division:—	
St. Giles and St. Geo., Blooms.	265,548
St. Andrew and St. George the Martyr	118,268
Saffron Hill Liberty	21,812
Rolls Liberty	13,504
St. Pancras	357,820
St. John, Hampstead	48,016
Paddington	70,612
Savoy Precinct	4,688
St. Mary-le-Strand (Duchy Liberty)	7,820
St. Clement Danes (ditto)	28,596
Lincoln's Inn (Extra Parochial)	10,492
Gray's Inn (ditto)	13,000

Other Extra Parochial Places	16,444
St. Mary-le-bone	678,808

Finsbury Division:—	
St. Luke	129,900
Glass House Yard Liberty	4,280
St. Sepulchre	12,580
St. James and St. John, Clerkenwell	145,558
St. Mary, Islington	124,384
St. Mary, Stoke Newington	18,652
Hornsey	24,948
Finchley	13,744
Fryern Barnet	5,540

Tower Division:—	
St. Mary, Whitechapel	121,352
Christ Church	30,844
St. Leonard, Shoreditch	136,284
Norton Folgate	7,116
St. John, Hackney	129,504
St. Matthew, Bethnal Green	126,040
Mile End, Old Town	85,524
Mile End, New Town	9,988
Bow	13,056
Bromley, St. Leonard	18,520
All Saints, Poplar	126,136
St. Ann	39,144
Ratcliff	22,136
St. Paul, Shadwell	181,888
St. George, East	96,004
St. John, Wapping	25,492
East Smithfield	22,524
St. Catharine's	11,556

## Ossulston Hundred continued.

Kensington Division:—	
Kensington	£80,960
St. Luke, Chelsea	114,948
Fulham	30,776
Hammersmith	28,408
Chiswick	14,796
Ealing	26,936
Acton	8,960
Wilsdon (including Twyford)	10,328

## EDMONTON HUNDRED.

Edmonton	29,998
Tottenham	37,264
Enfield	33,244
Hadley	3,660
South Mimms	11,980

## GORE HUNDRED.

Harrow	13,848
Pinner	4,796
Hendon	23,796
Great Stanmore	3,744
Little Stanmore	2,716
Kingsbury	3,940
Edgware	3,020

## ELTHORNE HUNDRED.

Uxbridge	6,328
Hillingdon	12,232
Ruislip	7,800
Ickenham	2,372
West Drayton	2,556
Harefield	5,624
Cowley	1,520
Harmondsworth	5,172
Hayes	5,760
Harlington	2,300
Northolt	2,224
Cranford	1,672
New Brentford	7,568
Hanwell	3,552
Greenford	2,952
Perrivale	1,132
Norwood	6,044

## SPELTHORNE HUNDRED.

Sunbury	7,200
Hampton Court and Town	7,392
Hampton Wick	6,620
Teddington	4,000
Hanworth	2,424
East Bedfont	3,652
Feltham	4,352
Littleton	1,216
Ashford	2,128
Laleham	3,300
Shepperton	3,648
Staines	7,348
Stanwell	7,052

## ISLEWORTH HUNDRED.

Isleworth	18,300
Twickenham	21,220
Heston	12,748

XVIII. COMPARATIVE ESTIMATE OF THE AMOUNT OF ANIMATE AND INANIMATE FORCE APPLIED TO AGRICULTURE AND THE ARTS, IN FRANCE AND GREAT BRITAIN.

(Abridged from M. Charles Dupin.)

THE 31,800,000 inhabitants which now constitute the population of France, are equivalent to a power of 12,609,057 individuals of the male sex, at the age of full vigour. It is a position generally admitted in France, that two-thirds of the population are employed in agriculture; and that a third only is occupied in manufacturing and commercial pursuits. Hence it results that France possesses

A human agricultural power equivalent to that of	8,406,038 labouring men,
And a power of industry, manufacturing and commercial, equal to	4,203,019

Total 12,609,057

Were it not that the industry of man had found the means of calling extraneous force to its aid, its means would be confined to the amount of power above enumerated: but man employs other forces than his own in agricultural labours, and principally that of the horse, of the ass, of the mule, the ox, and the cow; and with the help of these, the animate agricultural force of France has increased to the following sum:—

Human race	21,056,667	equivalent to	8,406,038	effective labourers.
Horses	1,600,000		11,200,000	
Oxen and cows	6,973,000		17,432,000	
Asses	240,000		240,000	

Total 37,278,038

On making similar calculations of the agricultural force of Great Britain, and stating at 15,000,000, the number of inhabitants of England and Scotland, of whom a third only are employed in agriculture, and the other two-thirds in commerce and manufactures, we shall have,

Agricultural force	2,132,446	effective working men.
Artisans of all professions	4,264,893	

Total 6,397,339

If we proceed in the same way with regard to Great Britain, as we have done with respect to France, and make a comparative calculation of the power in men, and the power in other animals, engaged in agriculture, we shall find,



Human race . . .	5,000,000	equivalent to	2,132,446	effective labourers.
Horses of full growth	1,250,000		8,750,000	
Oxen, cows, &c. . .	5,500,000		13,750,000	

	Total	24,632,446
Ireland ; approximating estimate		7,455,701

Total for the United Kingdom 32,088,147

Taking the proportion of this total force of 24,632,446 to the human force applicable to agriculture, we find it to be as 12. Whence it appears that the agriculturists of England and Scotland have discovered the means of creating a force, twelve times the amount of their personal corporeal force, by the use they make of domestic animals ; while the additional force obtained through similar means by the French agriculturists does not amount to five times their own. It is calculated that in France there are 46,000,000 hectares\* of land made to yield produce ; so that there is an animate power equal to that of 810 labourers, for the cultivation of every thousand hectares. The total number of hectares of productive land in Great Britain is 21,643,000 ; so that there is an animate power equal to that of 1138 working men for every thousand hectares. The produce of the land, in the respective countries, is in proportion to the power employed respectively in its cultivation. The case is the same in regard to manufactures.

The human force in France employed in commercial and manufacturing industry, is equivalent, according to the calculations already stated, to 4,203,019 effective working men ; to this power must be added that supplied by the use of horses, the number of which is computed at 300,000 employed in transport, for the saddle, in draught, &c. whereby the animate force of France is raised to 6,303,019 power of men.

The human force of Great Britain employed in commerce and manufactures, is equivalent to 4,264,893 effective men ; to this power then must also be added the power of 250,000 animals, employed in divers works of industry. These will raise the animate force of England and Scotland to 6,014,893 ; to which there must be superadded the approximating value of 1,260,604 effective men for Ireland : so that the commercial and manufacturing animate power of the United Kingdom must be computed at 7,275,497 labouring men.

To these animate powers should be joined also, in the case of both the countries, the inanimate powers, or the force supplied by water, wind and steam ; and the whole productive and commercial manufacturing power of England and France will be ascertained.

The total number of mills in France has been computed by the French authors on statistics at 76,000, of which about 10,000 may be set down as windmills ; the total force of hydraulic machines employed for forges, furnaces, and machinery of every kind, is

\* A hectare contains 10,000 square metres, or 100 ares. An English acre is very nearly equal to 40 ares ; therefore a hectare is about 2½ acres.

equal to the third part of that of the 10,000 windmills; the wind as employed in navigation, is equivalent to the power of 3,000,000 of men; and, lastly, the steam-engines in operation in France, exceed the power of 60,000 dynames\*, equivalent to the power of 480,000 working men turning a winch.

It has been calculated also, by the same writers, that besides windmills, hydraulic machines, &c., Great Britain possesses in steam-engines alone a moving power of at least 800,000 dynames, the effect of which is equal to the power of 6,400,000 men employed at the windlass. The commercial and manufacturing power of France is, therefore, in proportion to that of Great Britain, as follows:—

		France.		Great Britain.	
			men power		men power.
Inanimate powers.	Animate force . . .	6,303,019		7,275,497	
	Mills & Hydraulic engines	1,500,000		1,200,000	
	Windmills . . .	253,333		240,000	
	Wind and navigation .	3,000,000		12,000,000	
	Steam-engines . . .	480,000		6,400,000	
Total force		11,536,352		27,115,497	
			Ireland	1,002,667	
			Total	28,118,164	

Thus, the total of the inanimate force applied to the arts of all descriptions in France, scarcely exceeds the fourth of the same power applied to the same purposes in Great Britain; and the whole animate and inanimate power of Great Britain, applied to manufactures and commerce, is nearly treble the amount of that so applied in France. The agricultural power and the manufacturing and commercial power of the two countries bear a corresponding proportion to the total of the agricultural and manufactured produce, and their value in commerce.

## XIX. COMPARATIVE AMOUNT OF CRIME IN ENGLAND AND FRANCE.

(From a Report of a Committee of the House of Commons, 1828.)

“YOUR Committee have examined with attention an account of the state of Criminal Justice in France for the year 1826, presented to his Majesty Charles the Tenth by his Keeper of the Seals. Some of the results stated in that account may be compared with those contained in the summary statement for the gaols of England and Wales in the same year.

In France, the total number of Accused were	6,988
Acquitted . . .	2,640
Convicted . . .	4,348
	6,988

\* A dyname is equal to a thousand killograms raised to the height of 1000 metres; eight men employed at a winch can in one day raise a thousand killograms to the height of a thousand metres, or in other words, can produce a dyname of labour.

In England, Committed for trial . . . . .	16,147
Acquitted . . . . .	3,266
Not prosecuted, or no bills found . . . . .	1,786
	<hr/>
	5,052
Convicted . . . . .	11,095
	<hr/>
	16,147.

Of 4,348 convicted in France were condemned to death . . . 150  
 In England, of 11,095. . . . . 1,200

“Of those condemned to death in France, it would appear that the greater part were executed; in England, of 1,200 only 57 were executed.

“Of the crimes for which punishment of death was inflicted, we find in the French statement—murder, 11; attempt to murder, 38; parricide, 4; infanticide, 6; poisoning, 11; false money, 9; robbery on a public road, 1; other robberies, 2; arson of houses, 17; arson of other descriptions, 1. The English statement, besides the crimes contained above, contains, burglary, 10; forgery, 1; horse-stealing, 7; larceny in a dwelling-house to the value of 40s., 5; rape, 2; sheep-stealing, 3. In France it appears to be the practice to condemn in the first instance to the punishment intended to be inflicted. For instance, in France, robbery on the highway gives condemned to death, 1; hard labour for life, 30; for a term, 8; solitary confinement, 5; correctional punishments, 22. The English gives robbery on person, on the highway and other places, sentenced to death, 144; executed, 15.

“Of secondary punishments, France gives, hard labour for life, 281; for a term, 1,139; solitary confinement, 1,228; au carcan, 5; banishment, 1; degradation from civil rights, 1; correctional punishments, 1,478. In England we have transportation for life, 133; for 14 years, 185; 7 years, 1,945; imprisonment 5 years, none; 3 years, 11; 2 years and above 1 year, 297; 1 year, 1,201; 6 months and under, 5,813; whipping and fine, 310.

“With respect to terms of imprisonment, we find in the French statement,

For 20 years . . . . .	48
15 . . . . .	59
10 . . . . .	175
5 . . . . .	857
From 1 to 5 years . . . . .	512
6 months to 1 year . . . . .	68
Less than 6 months . . . . .	104

“In France the number of accused were in the proportion of 1 in 4,195 of the population; of the accused tried, 1 in 4,557. In England, the proportion would be greatly superior. But it is difficult to draw any parallel in this respect. The offences tried before the correctional tribunals in France are of a graver character than those which are punished in this country out of the Courts of Assize and Quarter Session. For instance, in France, under the head of crimes punished by the correctional tribunals, there ap-

pear under the title *Vols.* (Thefts) 10,796, of whom 4,364 were condemned to imprisonment for a year or more.

"Distinguishing crimes against the person, and those against property, the number under the former head are in France, of accused, 1,907; under the latter, 6,988; leaving out Corsica, the former number would be 1,821, the latter 6,939. In England including the same class of crimes, the numbers are,

Against the person	531
Against property	15,616

But adding to the 6,939, 10,796, the numbers would be

for France, against the Person	1,821
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Property	17,735
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England	531
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	15,616
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"Being in France, in the proportion of more than 1 to 10, while in England it is little more than 1 to 30. Without pretending to any great exactness on this subject, it may be inferred that the whole quantity of crime is greater in proportion to the population in England than in France; but that of offences against the person there are more, both in proportion to the whole number of offences, and to the population, in France than in England. The general conclusion from this and other facts seems to be, that crowded towns and flourishing manufactures tend to increase depredations on property, and to diminish acts of violence against the person.

"Passing to the tribunals of correctional police, under the head of *Chasse et Port d'Armes*, there appear 6,578 *prévenus*, of whom 5,047 were condemned, but 5,020 only to a fine. Under that of *délits ruraux*, the number *prévenus* are 5,109; of 3,659 are condemned 2,929 to fine.

It appears that the number of these judgments given in 1826 exceeds those of 1825 by 8,260, and that of these 6,049 were *délits forestiers*. No reason is given for this augmentation."

## XX. ACRES IN GREAT BRITAIN.

General Statement of the Cultivated, Uncultivated, and Unprofitable Land of the United Kingdom.

*From the Third Report of the Emigration Committee.*

	Cultivated.	Uncultivated Wastes capa- ble of im- provement.	Unprofitable.	Total.
	ACRES.	ACRES.	ACRES.	ACRES.
England . . .	25,632,000	3,454,000	3,256,400	32,342,400
Wales . . .	3,117,000	530,000	1,105,000	4,752,000
Scotland . .	5,265,000	5,950,000	8,523,930	19,738,930
Ireland . . .	12,125,280	4,900,000	2,416,664	19,441,944
British Islands .	383,690	166,000	569,469	1,119,159
	46,522,970	15,000,000	15,871,463	77,394,433

## XXI. EDUCATION IN ENGLAND.

IN the year 1818 a Select Committee of the House of Commons was appointed to inquire into the Education of the Poor, and a circular letter was addressed to the Ministers of the respective Parishes of Great Britain, requiring Returns of the number of Schools, endowed and unendowed, and of Scholars, both in day and Sunday Schools. The results were ordered to be printed;—and they form three folio volumes. The following is an abridged digest of the Returns for England:—

A GENERAL TABLE, SHEWING the STATE of EDUCATION in ENGLAND, in 1818.

COUNTIES.	Endowed Schools.			Unendowed Day Schools.		Sunday Schools.	
	Nos.	Children.	Revenue.	Nos.	Children.	Nos.	Children.
			£				
Bedford . . . . .	42	2,066	1,825	94	2,317	77	5,060
Berks . . . . .	91	2,305	3,571	286	7,968	89	5,083
Buckingham . . . . .	57	1,771	1,851	239	5,720	146	8,854
Cambridge . . . . .	60	2,163	2,416	266	7,469	75	3,914
Chester . . . . .	96	3,467	3,127	256	9,394	73	15,163
Cornwall . . . . .	51	1,392	771	555	12,908	123	10,968
Cumberland . . . . .	94	3,705	1,955	241	9,732	42	5,494
Derby . . . . .	116	3,825	5,973	326	11,154	127	11,222
Devon . . . . .	200	6,069	5,737	880	24,564	123	10,123
Dorset . . . . .	51	1,177	2,554	282	8,747	166	9,501
Durham . . . . .	69	3,179	1,803	353	15,012	76	8,083
Essex . . . . .	112	5,366	6,465	404	12,257	208	12,667
Gloucester . . . . .	161	3,941	11,034	362	10,827	238	17,210
Hereford . . . . .	65	1,897	2,406	131	3,811	39	2,693
Hertford . . . . .	45	1,655	2,218	221	6,380	81	4,984
Huntingdon . . . . .	38	1,010	1,096	93	2,493	32	1,424
Kent . . . . .	149	7,474	9,804	560	21,604	130	9,727
Lancaster . . . . .	217	12,428	16,791	450	26,205	208	51,610
Leicester . . . . .	87	2,962	3,934	239	6,787	182	12,185
Lincoln . . . . .	166	5,489	8,979	543	14,869	126	5,834
Middlesex . . . . .	157	16,130	98,050	385	23,289	110	16,773
Monmouth . . . . .	16	498	1,283	75	3,130	14	592
Norfolk . . . . .	100	3,723	5,217	589	16,695	211	9,804
Northampton . . . . .	126	4,250	3,938	271	6,967	191	11,724
Northumberland . . . . .	45	2,242	2,337	289	13,759	46	3,937
Nottingham . . . . .	72	2,652	3,976	308	10,422	119	10,103
Oxford . . . . .	79	2,572	1,974	233	5,856	118	5,715
Rutland . . . . .	13	343	1,015	62	1,397	22	1,062
Salop . . . . .	96	4,117	4,101	284	9,667	96	6,952
Somerset . . . . .	109	3,029	5,139	487	13,480	253	18,085
Southampton . . . . .	105	3,427	18,029	397	15,876	106	9,332
Stafford . . . . .	144	5,786	6,496	345	13,196	150	19,293
Suffolk . . . . .	120	3,502	3,230	450	13,048	257	14,570
Surrey . . . . .	77	6,216	7,087	319	12,967	71	9,245
Sussex . . . . .	64	2,537	2,705	498	95,507	10	6,492
Warwick . . . . .	110	5,200	8,399	304	9,759	157	12,279
Westmorland . . . . .	76	3,239	2,149	113	2,807	22	1,178
Wilts . . . . .	97	2,504	2,408	346	8,187	215	14,848
Worcester . . . . .	85	4,004	6,183	183	5,744	108	9,384
York, East Riding . . . . .	100	3,189	4,471	403	12,099	74	6,793
York, North Riding . . . . .	123	3,770	3,238	428	13,447	50	2,569
York, West Riding . . . . .	283	9,342	13,765	727	31,282	321	50,163
Grand Total . . . . .	4,167	165,433	300,525	14282	478,849	5,162	452,817

The General Table, from which we have extracted the preceding summary, also contains, for each county, the number of New schools (that is, schools upon the systems of the National Society and the British and Foreign School Society) as distinguished from ordinary schools; as well as the number of Dame or Preparatory schools (now called Infant Schools). Of these interesting particulars we can only give the totals:—

#### ENDOWED SCHOOLS.

New	.	.	302	Children	39,590	} of whom	145,952 Free.
Ordinary	.	.	3,865	"	125,843		19,481 Pay.

#### UNENDOWED DAY SCHOOLS.

New	.	.	820	Children	105,582	} of whom	168,064 Free.
Dames (Infants)	.	.	3,102	"	53,624		
Ordinary	.	.	10,360	"	319,643		310,785 Pay.

#### SUNDAY SCHOOLS.

New	.	.	404	Children	50,979
Ordinary	.	.	4,758	"	401,838

We thus see that, in 1818, of the children chiefly of the working classes in England 644,282 received daily instruction; and that of these, 322,518 were taught gratuitously, and 321,764 paid for their education.

Since the date of these Returns, a period of ten years, the most extraordinary exertions have been used to promote the education of the people. In the great work of teaching the children of the poor the principles of Religion, and the elements of Useful Knowledge, all parties and persuasions have united with the most charitable zeal. The belief that Universal Education can have any injurious effects upon the welfare of the community is now happily exploded; and we have the satisfaction of believing that there are very few districts in England where the children of the working classes may not now obtain instruction.

Although the fact of the great and general increase of the means of Education could not be doubted, it was manifestly desirable to establish some data, by which a calculation of the average amount of this increase might be obtained. Mr. Brougham, who had been Chairman of the Parliamentary Committee in 1818, accordingly addressed a considerable number of letters in the spring of 1828 to the ministers of parishes of each county in England (excepting Middlesex), and received answers in the highest degree satisfactory. The results were communicated to the House of Commons, late in the Session, (in Mr. Brougham's absence) by Mr. Spring Rice; and that gentleman stated, that the clergy were extremely prompt and zealous in transmitting the requisite information. We are enabled to publish the Table of these Returns from which Mr. S. Rice made his statement.

**PROGRESS OF EDUCATION IN ENGLAND IN THE  
LAST TEN YEARS.**

A STATEMENT, shewing the Number of Returns to the Circular dated 14th April, 1828; the proportion of Returns to the total Parishes of each County; the Number of Parishes without any Schools in the Year 1818; the Population of those Parishes in 1821; also the Unendowed Day Schools, in the parishes referred to in column 1, and Children attending them, in 1818, proportional to the Number of Schools and Children for the same parishes returned in answer to the said Circulars of 14th April, 1828.

COUNTIES.	Number of Returns, 1828.	Proportion of Returns to whole County.	Parishes without Schools, 1818.	Popula- tion of the Parishes without Schools, 1821.	1818. Unendowed Day Schools.		1828. Unendowed Day Schools.	
					No.	Children	No.	Children
Bedford.....	4	1-31st.	29	11,882	18	428	44	745
Berks.....	9	1-19th.	24	9,554	25	660	37	1025
Bucks.....	9	1-23rd.	59	14,067	22	528	48	1011
Cambridge.....	11	1-16th.	28	9,439	36	984	87	2642
Chester.....	5	1-30th.	14	10,308	11	268	23	524
Cornwall.....	14	1-15th.	25	15,191	53	1508	109	3246
Cumberland.....	7	1-16th.	13	6,996	15	1129	53	1468
Devon.....	20	1-25th.	80	25,552	91	2358	173	3920
Dorset.....	10	1-27th.	52	10,468	10	305	59	1165
Durham.....	6	1-13th.	10	2,803	43	850	94	3579
Essex.....	17	1-25th.	99	30,510	28	735	78	2587
Gloucester.....	12	1-28th.	65	20,542	23	640	65	1301
Hereford.....	11	1-21st.	89	21,328	18	700	31	1156
Hertford.....	11	1-12th.	26	9,319	40	1163	49	1405
Huntingdon.....	6	1-6th.	24	5,953	16	295	31	727
Kent.....	24	1-18th.	111	35,297	64	2770	209	7186
Lancaster.....	3	1-69th.	2	1,348	7	895	30	2124
Leicester.....	11	1-28th.	45	11,516	24	1088	77	2258
Lincoln.....	19	1-34th.	224	38,563	43	2208	159	5218
Norfolk.....	39	1-19th.	224	50,311	94	2606	186	5380
Northampton...	16	1-19th.	60	13,772	21	596	110	3137
Northumberland	8	1-13th.	3	5,001	43	2036	62	2891
Nottingham.....	6	1-38th.	49	10,274	14	265	15	585
Oxford.....	18	1-13th.	47	11,486	22	571	85	2424
Rutland.....	5	1-11th.	4	196	5	231	19	573
Salop.....	13	1-19th.	54	14,666	36	2037	83	2963
Somerset.....	19	1-26th.	119	29,944	26	701	94	3069
Southampton...	22	1-15th.	79	21,998	71	3346	99	3998
Stafford.....	7	1-29th.	18	3,624	11	840	54	1850
Suffolk.....	20	1-26th.	132	35,391	45	1695	153	3702
Surrey.....	12	1-13th.	16	6,649	35	1794	74	5210
Sussex.....	17	1-19th.	76	22,106	86	2541	117	4164
Warwick.....	12	1-18th.	36	7,758	43	1475	71	1763
Westmorland...	7	1-10th.	6	1,246	51	1659	98	2668
Wilts.....	14	1-22nd.	56	15,774	22	589	80	2377
Worcester.....	11	1-19th.	46	9,459	14	1276	67	3231
York, E. Riding	13	1-22nd.	35	7,787	64	1755	90	2972
York, N. do...	14	1-15th.	31	7,560	95	3549	192	6076
York, W. do...	5	1-40th.	14	3,710	26	960	55	3251
Total...	487	Av. 1-21st	2124	569,948	1411	50,034	3260	105571

From a consideration of the important facts contained in these Returns, we are enabled to arrive at some conclusions, to a certain extent satisfactory, upon the great progress of education in England.

The 487 Returns to the Circular Letter of 1828, are in the proportion of 1-21st to the whole number of Parishes of England.

Of the 487 Returns, 123 are from Parishes which did not possess any Schools in 1818, but which have new Schools established; this is in the proportion of 1-17th to the 2124 parishes without schools in 1818.

In 1818 there were 1411 Unendowed Day Schools in the 487 Parishes, which now return 3260; Increase, 1849; the number being considerably more than doubled.

In 1818 there were 50,034 children educated in the 487 Parishes, which now return 105,571; Increase 55,537; the number of scholars not being increased in quite so great a proportion as the number of Schools.

As, therefore, the present number of Unendowed Schools in the 487 Parishes, compared with the number in 1818, is as 16 to 7, the average present number of Schools in the whole kingdom, as compared with the 14,000 in 1818, would be 32,000.

And, as the present number of children in the Unendowed Schools of the 487 Parishes, compared with the number in 1818, is as 21 to 10, the average present number in the whole kingdom, as compared with the 478,000 in 1818, would be 1,003,800.

With these data before us, we have reason to believe that the principle of doubling the number of children now educated in unendowed schools, as compared with the returns of 1818, may be applied with tolerable correctness to the whole kingdom. The increase of schools upon the Bell and Lancaster systems is in a much larger proportion. In the endowed schools, and the unendowed schools, the scholars may fairly be estimated at more than a million\*.

\* The Digest of the Committee of 1818 contains also Returns from Wales and Scotland. We subjoin an Abstract of the Totals; as well as those from Ireland of 1827.

#### WALES, 1818.

##### ENDOWED SCHOOLS.

New . . . 10	Children 990	} of whom 6,804 Free. 821 Pay.
Ordinary . 199	.. 6,635	

##### UNENDOWED DAY SCHOOLS.

New . . . 41	Children 4,480	} of whom 6,514 Free. 16,462 Pay.
Dames . . 73	" 1,623	
Ordinary . 458	.. 16,873	

##### SUNDAY SCHOOLS.

New, 8; Children, 713. Ordinary, 293; Children, 23,965.

#### SCOTLAND, 1818.

##### PAROCHIAL AND ENDOWED SCHOOLS.

Parochial, 942; Children, 54,161. Endowed, 212; Children, 10,177.

##### UNENDOWED DAY SCHOOLS.

Dames, 257; Children, 5,560. Ordinary, 2,222; Children, 106,627.  
Sunday, 807; Children, 53,449.

#### IRELAND, 1827.

Total Number of Schools . . .	11,823
Masters and Mistresses . . .	12,530
Total Number of Children . . .	563,904



The following is a summary of Sunday schools, published in the last annual report of "the National Society for Promoting the Education of the Poor in the Principles of the Established Church." This account is founded upon returns sent by the parochial clergy, in 1826 :—

SUMMARY of SUNDAY SCHOOL RETURNS, to a Circular issued by the National Society.

DIOCESE.	Schools.	Boys.	Girls.	Total.
Bangor .....	46	1,152	1,096	2,248
Bristol .....	213	7,131	6,790	13,921
Bath and Wells .....	292	8,737	8,188	16,925
Canterbury .....	227	6,620	6,372	12,992
Carlisle.....	79	2,057	1,999	4,056
Chichester .....	141	4,252	3,862	8,114
Chester.....	466	29,014	28,605	57,619
Durham .....	167	5,294	4,839	10,133
Ely .....	80	3,458	3,665	7,123
Exeter .....	411	11,906	11,651	23,557
Gloucester .....	274	7,015	7,297	14,312
Hereford .....	155	4,328	4,371	8,699
London.....	536	18,147	16,633	34,780
Lincoln.....	852	23,515	23,462	46,977
Litchfield and Coventry .....	574	18,786	18,312	37,098
Llandaff .....	59	1,370	1,423	2,793
Norwich .....	706	15,910	16,215	32,125
Oxford .....	161	3,939	3,750	7,689
Peterborough .....	249	6,926	6,698	13,624
Rochester.....	80	2,957	2,655	5,612
Salisbury .....	329	9,311	9,116	18,427
St. David's .....	136	4,213	4,218	8,431
St. Asaph .....	61	1,864	1,836	3,700
Winchester .....	333	11,196	10,268	21,464
Worcester .....	170	5,582	5,726	11,308
York.....	678	26,259	24,942	51,201
Total.....	7,475	240,939	233,989	474,928
Returns, in which the Schools and Children are accurately given .....	7,475	240,939	233,989	474,928
410 Schools entd., the Children of which are omitted at an average of 50 each .....	.....	102,50	10,250	20,500
Calculations upon the returns (not received) from above 1000 incumbencies .....	924	27,500	27,500	55,000
Grand Total.....	8,399	278,689	271,739	550,428

It is much to be desired that a similar return could be obtained from the various congregations of Dissenters, amongst whom

Sunday schools are especially encouraged. We have little doubt that the same principle which we have considered a just one to apply to the unendowed day schools, would apply to the total increase of Sunday schools since 1818. The number of children then attending these schools was 452,817;—that number doubled, is 905,634.

It would be difficult to ascertain what number of children attending the Sunday schools also attend day schools. We should be inclined to consider that more than half enjoy the advantages of both modes of obtaining knowledge.

The result of these estimates (and they are of course imperfect) would lead us to hope that about a million and a half of the children of the humbler classes are receiving, in England, the inestimable advantages of education:—and as the children of both sexes, between the ages of five and twelve, amount to nearly 2,000,000, when the number of those who are taught in the higher schools is deducted, we may entertain a reasonable confidence that no very large portion of the children of the working population are now wanting the means of instruction. It is however obvious that the more generally the blessings of education are diffused throughout the kingdom, the greater is the necessity for establishing Schools in those parishes which may be still without adequate means of instruction.

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## XXII. MORAL INFLUENCE OF EDUCATION, AND OF CIVILIZATION IN GENERAL, ON THE DIMINUTION OF CRIME.

THOUGH the number of persons committed for trial has progressively increased in England, for a series of years, it by no means follows that the quantity of *crime* has increased; and it is perfectly certain, that crimes of the most atrocious character have diminished. Thus, though the Parliamentary Returns of the number of criminal offenders committed for trial in 1827, be greater by 1,774, than those of 1826, it will be necessary that we should minutely investigate the nature of the offences with which these persons are charged, before we affirm that the morals of the people, generally, were more unsound in 1827, than in 1826. This inquiry is the more important, as some persons—we trust a very few—are still disposed to see a connexion between the progress of education, and the progress of offences against the laws; not perceiving, as is forcibly expressed in a late report of a Committee of the House of Commons, that “the degree of intelligence and forethought amongst the poor themselves, and on this account the general diffusion of such an education as may assist and promote the development of these qualities,” is the best foundation upon which to build every improvement in the condition of the humbler classes.

The returns of commitments, in the several counties of the kingdom, are the documents which exhibit what we familiarly speak of as an increase of crime. But, before we come to any conclusions on this subject, we ought to take into account the circumstances which may have increased the number of commitments, without any alteration in the number of offences. There are occasionally

changes in the law, by which the prosecution of particular offences is made payable out of the county rates, which expense was previously borne by the individual prosecutor. For instance, the assault of a peace-officer, in the discharge of his duty, has, within a year or two, been very properly placed amongst that class of offences which are prosecuted at the expense of the community. The apparent multiplication of this offence was immediate, upon the alteration of the law. There were not more constables assaulted in the country, but there were an infinitely greater number who sought the protection of courts of justice, because they were indemnified in their expenses. Upon this point the opinion of a Committee of the House of Commons, who made a report during the last session, on the subject of criminal commitments and convictions, is particularly valuable:—

“Your Committee have much satisfaction in stating their confirmed opinion, that great part of the increase in the number of criminal commitments arises from other causes than the increase of crime. Offences which were formerly either passed over entirely, or were visited with a summary chastisement on the spot, are now made occasions of commitment to gaol and regular trial. Mr. Dealtry, a magistrate for the West Riding of the county of York, says, ‘I think one reason we may give for the increase of crime, or *the greater exhibition of it to public view*, is the seizure and delivery to the police of all those who commit offences, that are styled offences at all. I remember in former days, persons were taken and pumped upon, or something of that sort; but now they are handed over to the police, and tried on it.’ Sir Thomas Baring, and other witnesses, gave a similar testimony. The Malicious Trespass Act, the Act for paying prosecutors their expenses in cases of misdemeanor, and other acts not necessary to mention, have tended to fill the prisons, without any positive increase of crime. The magistrates, likewise, are more ready to commit than they used to be; and the fees paid to their clerks are a temptation to bring before them every case of petty offence, arising out of village squabbles or trifling disorders. There appears no good reason why a regular schedule should not be made of the fees to be paid to the clerks of magistrates. Uniformity on this subject is most desirable, even were there no existing abuses, which the Committee have reason to fear is much to be apprehended.”

There is a fact, which is most important to keep in view, namely, that in England, and in every other country rapidly advancing in civilization, *offences against the person are diminished*, precisely in the proportion that the means of education are enlarged. The greater exhibition of offences has been found, not only in this country, but in France, in the United States, in Switzerland, to be limited to the smaller offences against property. For example—in London and Middlesex, as stated by Mr. Peel in the House of Commons, the number of commitments in 1820 was 2,773; in 1826, 3,457; increase of commitments 684;—in 1820, of these commitments, the number for larceny, was 1,384;—in 1826, 2,118; increase of commitments for larceny, 734. Thus,

we see, that whilst in 1826, there was a large increase of offences against property, there was an actual diminution of crimes against the person.

The report of a Committee of the House of Commons, which we have before quoted, contains an interesting passage upon this branch of the subject—

“Another conclusion to which the Committee have come is likewise consolatory. It appears evident, that the number of atrocious offences has not increased *in proportion to the increase of population*, and that with the advancement of civilization, the darker crimes become less frequent. The number of persons convicted of murder, from the years 1821 to 1827 inclusive, adding thereto those convicted of shooting at, stabbing, and administering poison with intent to murder, were respectively, 35, 57, 26, 38, 29, 27, 47. The number charged with murder, shooting at, stabbing, and administering poison with intent to murder, were from 1821 to 1827, 232, 241, 239, 253, 273, 245, 288. The whole number of persons tried for offences against the person, in 1827, including robbery of the person, which ought not properly to have been included, were under 1,000.

“Thus it appears that, although the number of offences in the mass of our dense population is very considerable, yet when the subject comes to be examined, security of life and limb was never greater. Property, it is true, is not equally safe; but even here, there are not any large proportion of offences, which reach to the ruin of the person against whom the offence is committed, or to subject property in general to any very serious risks.”

Thus far of the *Kingdom*, generally.

The criminal calendar of *London and Middlesex* exhibits, for the respective periods from 1811 to 1817, and from 1821 to 1827, an average increase of committals in the latter seven years, equal to 48 per cent. The convictions, during an average of the same periods, have increased 55 per cent. The population of London and Middlesex has been computed to have increased 19 per cent.; therefore, of the convictions, 36 per cent. remains to be accounted for by other causes than the increase of population. That large increase, afflicting as it is, may be attributed to the large increase of petty offences, of stealing from the house, or the person, “goods which are easily transported, and may be quickly converted into money;” and to the greater vigilance of the police, which renders prosecutions more certain. In the last report on the police of the Metropolis (1828), we find a valuable table of the classes of criminal offences, in the years from 1811 to 1817, and from 1821 to 1827, respectively. The following are a few of the most important results:—

1. While the average of convictions from 1821 to 1827 has increased 55 per cent., as compared with the former period, the number of those sentenced to death has increased 4 per cent.; but the population having increased 19 per cent., there is thus a positive diminution of 15 per cent. upon the higher offences, subject to the penalty of death, generally;

2. For the higher crimes against the person, such as murder, manslaughter, shooting, stabbing, and poisoning, the number of convictions, followed by sentence of death, has decreased 50 per cent.

3. For some of the most atrocious offences against property, such as arson, and maiming of cattle, the number of convictions, followed by sentence of death, has decreased 50 per cent.

4. For the offences of coining and forgery, uttering base coin, &c., the number of convictions has decreased 22 per cent., and the number of those sentenced to death has decreased 43 per cent. This particular decrease is principally to be attributed to the withdrawal of small notes of the Bank of England from circulation.

The great increase of convictions has, therefore, been in the class of frauds, and larcenies of all descriptions. This result, for London and Middlesex, is also true, as will be seen from the following table, with reference to all ENGLAND AND WALES :—

Years.	Total Convictions.	Total Convictions for Larceny.	Yearly Increase of Convictions.	Yearly Inc. of Convictions for Larceny.	Yearly Inc. of Convictions <i>not</i> for Larceny.
1821	8788	6629	—	—	—
1822	8209	6424	—	—	—
1823	8204	6452	—	26	—
1824	9425	7550	1221	1068	123
1825	9964	8011	539	461	78
1826	11,095	8962	1131	951	180
1827	12,564	9803	1469	841	628

Much of the large increase of convictions, not for larceny, in 1827, may be distinctly referred to the passing of the act for paying prosecutors their expenses in cases of misdemeanor. The increase in 1824, 1825, and 1826, is also to be referred to changes in legislation and temporary causes. Offences against the Game Laws have greatly multiplied the number of commitments. From 1820 to 1826, 12,000 persons were committed to the County prisons under charges of poaching.

From the returns for England and Wales, of which we have thus given the results, it appears that, since 1821, the convictions for larceny (that is, for robbery and theft of all descriptions) have increased 50 per cent.; while the population has increased, by computation, about 16 per cent. We have thus 34 per cent. of this increase of crimes against property, unaccounted for by the increase of population. Some of this increase is real, and some only more apparent.

It is at this point that those persons who may believe that the increase of education has a tendency to increase the number of offences against *property*, will take their ground; for it is undeniable, that the higher offences against the *person*, and all robberies attended with violence, have greatly diminished. The number of capital convictions for England and Wales in 1820, was 1236; in 1826, 1200. (Let the increase of population—19 per cent. in London and Middlesex, and 16 per cent. throughout the

country—always be borne in mind.) The latter year was one of great suffering amongst the manufacturing population, and yet the higher crimes had diminished; but, with reference to the real and more apparent increase of the smaller crimes against property, the greater multiplication of property, in a highly-civilized state of society, offers a ready solution why such a growing tendency to theft may exist notwithstanding the progress of education. It is not that education increases the number of thieves, but that they increase in spite of education, from the constant addition to the number of the objects of temptation—from the greater luxuries with which every individual is surrounded—from the increased rapidity with which goods may be transported to distant parts of the country—and from the more easy communication with the Continent, to which the increase of horse-stealing may be mainly attributable. Add all these causes, and many others, to a more vigilant administration of justice, which produces committals for the most trifling offences against property, and we shall easily understand how the return of committals may be increased, while the great bulk of the people are becoming more intelligent and more prudent, and are acquiring that hatred of unjust and dishonourable actions, which the enlargement of the understanding, and the cultivation of the better feelings of our nature, must invariably produce. Fortunately we have very clear evidence, that even the great bulk of felonious offences are to be found amongst the ignorant part of the population. The Rev. James Brown, Chaplain of Norwich Castle, writing to the Society for the Improvement of Prison Discipline, says—"I have ever been convinced that ignorance is productive of crime; but nothing can so fully confirm that conviction, as an intimate knowledge of the inmates of a prison. From January 1825 to March 1826, 400 prisoners came under my examination:—of these, 173 could neither read nor write; 28 merely knew the alphabet; 49 could read very imperfectly, so as not to be able to obtain any information by it; 51 could read only; and 99 could read and write."

M. Charles Lucas, an advocate in the Royal Court at Paris, who is preparing a work on the subject of the influence of civilization on the restraint of crime, and who has received a prize for an Essay on Capital Punishments, contends, with reference to the greater accumulation of property in a highly-civilized state, that the increase of offences against property in England ought to be measured, not only by the increase of population, but by the increase of property; and that it would be as inaccurate, in regard to crimes of this nature, to omit an estimate of the wealth of a people, as to omit any other statistical fact upon which a result might be established. To compare, for instance, Spain with England or France, in respect to the number of offences against property, without taking into consideration the immense difference which exists in the progress which the human mind has made in the countries so compared, and, consequently, in the amount of objects of private rights which are the fruit of that progress, would be precisely the same as comparing the morality of the Spanish Peninsula

with that of the little canton of Geneva, according to the sum total of general delinquencies in each country, without considering that there are 10,049,000 more inhabitants in the one than in the other. This reasoning is certainly true, when we are comparing distant countries or distant epochs; and as all great changes in the condition of a people are brought about by small gradations, there may be, in the same way, an essential difference in England between the opportunities of committing offences against property in 1821 and 1827, from the circumstance of the wider diffusion of property, and the manifest increase of every commercial transaction. But if this reasoning be considered doubtful, the same doubt cannot attach to the diminished number of the higher offences.

We have, from recent and authentic documents, established the fact of the diminution, in England, of the higher offences against the person and against property; and to what can we attribute this happy result, but to the general progress of civilization, and to the diffusion of education in particular? To inform the understanding—to unlock the stores of useful knowledge—to inspire a taste for intellectual enjoyments—to turn away the mind from low and degrading pursuits—to teach each man his proper relations with society—to impress upon him the dependence of all existence upon a wise and beneficent Providence,—and by all this to second and enforce the duties presented by the pure system of religious instruction under which we have the happiness to live—education such as this must restrain and subdue those tumultuous passions which invariably lead to the higher crimes. The result is the same in all countries.

M. Lucas, the writer whom we have already noticed, has collected, with much accuracy, a body of facts relating to France, Great Britain, the cantons of Geneva and Vaud, and the United States—all of which tend to confirm the principles we have endeavoured to establish,—that the higher crimes are lessened, as men become more civilized and enlightened; and that, though offences against property may increase, crimes against the person are invariably diminished.

With regard to France, this fact has been clearly proved by the calculations of M. Charles Dupin. In the northern departments of that country, where the inhabitants are the best instructed, the higher crimes against the person are rare; in the southern, where the people are very ignorant, the most frightful crimes are twice as numerous. But again it is remarkable, that, in the north, the richest and most enlightened portion of France, the crimes against property exceeded, in 1826 and 1827, those in the south by 917; but then, of those crimes, the south exhibits the greatest number of atrocious examples, having 207 highway robberies, while the north had only 82.

In the canton of Vaud, from 1803 to 1826, the total number of offences was 1914. Of these, there were only 52 of the highest crimes against the person. Of the offences against property

only 75 were of the gravest character of crime, such as burglary and highway robbery.

In the canton of Geneva, from 1815 to 1826, there were 212 criminal procedures, of which 27 only were for crimes against the person. The number of offences against property was 185, of which 145 were simple larcenies.

In the state of Pennsylvania, from 1787 to 1825, the total number of convictions was 7397, of which 628 were for offences against the person. Of the remaining 6769 offences against property, 5338 were larcenies.

We have thus examined the state of crime under five different governments, and amongst the most civilized people of our age. Let us now consult the criminal records of Spain, one of the countries the most backward in modern civilization. Shall we find, in that country of ignorance and prejudice, that the majority of crimes belong to offences against property—to thefts of various shades of criminality, and of various extent in their consequences—some being very serious injuries to the persons from whom the goods are stolen, and some the most trivial that can well be imagined? No! the frightful catalogue of crimes against the person, in this benighted country, for one year, amounts to 3436 offences, amongst which are—

Homicides . . . . .	1233
Infanticides . . . . .	13
Poisonings . . . . .	5
Anthropophagy? . . . . .	1
Cutting and Maiming . . . . .	1773*

We thus see that in Spain the greater quantity of crime is precisely of an opposite character to that which exists in France, Great Britain, Switzerland, and Pennsylvania.

On the other hand, the crimes against property amount only to 2379.

From these data, we may conclude that the great proportion of offences amongst an ignorant people are those which proceed from the licentious and revengeful passions, unsubdued by the enlightenment of the understanding, and the subjection of the will to true morality and pure religion. The great proportion of offences amongst a rich and highly-cultivated people, are those which proceed from those temptations of property, whose accumulation on every side is the result of capital and intellectual energy.

### XXIII. STATE OF THE SUPPLY OF WATER IN THE METROPOLIS.

THE general dissatisfaction amongst the inhabitants of London, as to the quality of the water with which they were supplied by the respective companies, produced, early in the year 1823, the appointment of a commission under the Great Seal, for inquiring into this important subject. The commissioners were Dr. Roget (Se-

\* This comparative statement of offences in France, Switzerland, the United States and Spain, rests upon the authority of an article in the *Bulletin Universel*, for Sept. The precise year is not mentioned.



cretary to the Royal Society), Mr. Brande, and Mr. Telford. On the 21st of April, they agreed upon a Report, which was afterwards submitted to Parliament. The Commission has since been dissolved; but the conclusions to which the Commissioners came in their Report, have since been fully adopted by a Committee of the House of Commons. The following is an abridgement of this important document, which must necessarily form the foundation of any future proceedings for the remedy of evils, the existence of which is so clearly established\*.

The Inquiry of the Commissioners was limited to the description, the quality, and the salubrity of the water. The Report also notices the quantity supplied, and the mode of supply.

The supply of that portion of the metropolis situated upon the North side of the Thames is dependent upon five companies, namely:—

The New River,  
The East London,  
The West Middlesex,  
The Chelsea, and  
The Grand Junction.

THE NEW RIVER derives its principal supplies of water from a spring at Chadwell, between Hertford and Ware, about twenty-one miles north of London, and also from an arm of the river Lea, the source of which is near the Chadwell spring—in the proportion of about two-thirds from the former, and one-third from the latter. These united waters are conducted by an artificial channel, nearly forty miles in length, to four reservoirs, called the New River Head, at Clerkenwell—proper means being adopted to prevent the ingress of fish and weeds, and arrangements being made in respect to the mains so as to prevent interruption of service in case of repairs. Since the abandonment of the London bridge and of the York Buildings Water Works, whose former districts are now supplied by the New River Company, they have found it advisable to erect an engine at Broken Wharf, Thames Street, by which they are enabled occasionally to supply parts of their district with Thames water, when from long-continued droughts, severe frosts, or other accidental causes, the flow of the New River is impeded. The quantity of Thames water thus supplied, bears a very trifling proportion to the other source; the engine at Broken Wharf having been worked for seventy-six hours only, in January and February of 1827, and for one hundred hours during the drought of July and August. The number of tenants supplied by the New River Company, is between 66,000 and 67,000, and the quantity of water which is daily supplied exceeds 13,000,000 gallons, being about 2,000,000 cubic feet.

THE EAST LONDON WATER WORKS are situated at Old Ford, on the River Lea; but as the tide of the Thames flows up that river to the extent of a mile beyond the works, and as their sup-

\* In the subsequent Report of the Committee of the House of Commons, to which we have alluded, a strong opinion is expressed that the rates paid to the Companies are very unequal; and that no satisfactory results, in this particular, have been produced from their competition.

plies are taken during the ascending tide, the description of water thus furnished will closely approximate to that of the Thames. This company has four reservoirs—the number of tenants supplied amounts to about 42,000, and the daily consumption of water to nearly 6,000,000 gallons, or about 950,000 cubic feet.

THE WEST MIDDLESEX WATER WORKS are upon the banks of the Thames, at the upper end of Hammersmith, and draw water exclusively from that river opposite to the works. They have two reservoirs, one at Kensington, and one at Little Primrose Hill, which are supplied by the engines at Hammersmith, and they serve about 15,000 tenants—the average daily consumption of water is 2,250,000 gallons or about 360,000 cubic feet.

THE CHELSEA WATER WORKS are upon the banks of the river about a quarter of a mile east of Chelsea Hospital, and their supplies are derived entirely from the Thames opposite to their works. They have two reservoirs, one in Hyde Park, and one in the Green Park close to Piccadilly. They supply about 12,400 houses.—The average daily supply to the whole being about 1,760,000 gallons, or nearly 282,000 cubic feet.

THE GRAND JUNCTION WATER WORKS are also at Chelsea immediately adjacent to, and east of the Hospital. Their supplies of water are derived from the Thames, with which they fill three reservoirs situated at Paddington, and from these their district is served. The number of their tenants does not appear to exceed 7,700, but their daily consumption of water is about 2,800,000 gallons, or upwards of 450,000 cubic feet.

From this statement it appears that the portion of the town upon the north side of the Thames, including the cities of London and Westminster, is supplied daily with nearly 26,000,000 gallons of water, and that the total number of houses and buildings receiving this supply amounts to about 144,000. The water is of course very unequally distributed, the average consumption in each house being apparently greatest in the district supplied by the Grand Junction Company, where it amounts to about 363 gallons daily per house. Taking the average of the whole supply, the daily consumption of each house is about 180 gallons. Of this water, more than one half of which is derived from the Thames, a large portion is delivered at very considerable elevations above the level of the river, constituting what is called "*high service*," for which purpose 15 steam engines are employed, exerting a power of about 1,105 horses.

It is obvious from the above statement, that the *quantity* of water supplied in London and Westminster is abundant. The Commissioners have reason to believe that hospitals, workhouses, and other similar establishments, where an abundance of water is an essential requisite, are in all cases duly supplied—the supplies in case of fire have of late been always ample, for among other advantages of the reservoirs annexed to the works on the Middlesex side of the river, is that of having at command a large head of water, by which the mains are kept full, and in many districts are under considerable pressure. The supply of a large quantity of water upon any sudden emergency is thus insured, and among other great ad-

is that of their sustaining the pressure of a column of water, which it would have been impossible in the former state of the works to have commanded.

As far, therefore, as regards the description and quantity of water supplied to the cities of London and Westminster, it appears that more than one half of the consumption is derived from the Thames, and that it is in such abundance as not only to supply all necessary demands upon ordinary and extraordinary occasions, but that a proportion is constantly suffered to run to waste, by which the cleansing of the drains of houses and of the common sewers is effectually accomplished, all accumulations of filth obviated, and the general healthiness of the metropolis promoted.

Those parts of the metropolis situated upon the south side of the river including the borough of Southwark, have their supplies of water from

The Lambeth,  
The South London, and  
The Southwark Water Works.

THE LAMBETH WATER WORKS are situated upon the banks of the Thames, between Westminster and Waterloo bridges, and this establishment draws its supplies from the river immediately opposite to the works. They have no reservoir, the water being forced immediately from the river into the mains, and thence distributed to about 16,000 tenants, who consume 1,244,000 gallons daily, or nearly 200,000 cubic feet.

THE VAUXHALL, OR SOUTH LONDON WATER WORKS, are situated in Kennington Lane, and have also an engine on the River at the foot of Vauxhall bridge. They supply Thames water exclusively, and have reservoirs for the service of their upper engine. The number of their tenants is about 10,000, and the daily consumption of water about 1,000,000 gallons, or about 160,000 cubic feet.

THE SOUTHWARK WATER WORKS are upon the banks of the river, between Southwark and London bridges, and derive the whole of their water from the middle of the river opposite to their engines. They supply about 7,000 tenants with 720,000 gallons of water, or 115,000 cubic feet, daily.

Each of these establishments has two engines—the aggregate power of the six may be estimated at about 235 horses. The whole of water which they supply amounts to nearly 3,000,000 gallons or 485,000 cubic feet daily, which is distributed among 33,000 tenants.

There appears to be no just complaints respecting the quantity of water furnished by any of these southern companies, except in cases of fire, when there has occasionally been a serious deficiency. The Commissioners have inquired into the causes of this, and are induced to refer it to the want of proper reservoirs for preserving a head of water upon the mains when the engines are not working. On these occasions much time is often lost in sending to the engine of the district, and if the steam be not up, and the fire low, further and fatal delay sometimes occurs.

The total amount of the quantity of water required for the daily supply of the inhabitants of the metropolis, and for the use of

various manufactories, appears to be about 29,000,000 gallons, or 4,650,000 cubic feet.

#### QUALITY AND SALUBRITY OF THE WATER.

Assuming the supplies to be derived directly from the river and to be subjected to no intermediate process tending to purification, it is sufficiently obvious that the state of the weather will materially affect the purity of the water, which is sometimes comparatively clean and clear, and at others loaded with various matters in mechanical suspension, rendering it more or less coloured and turbid. In the latter state when thrown into cisterns, &c. it is unfit for use, but being allowed to rest, it forms a certain quantity of deposit, and becomes sufficiently clear for ordinary purposes. This deposit is the source of several evils ;—it renders the cisterns foul, and runs off into those pipes which issue from, or near the bottom of the reservoirs. By the agitation which accompanies every fresh influx of water, this deposit is constantly stirred up, and becomes a renewed source of contamination to the whole mass, and although chiefly consisting of earthy substances in a state of minute division, it is apt also to contain such proportion of organic matters, as will occasion a degree of putrefaction when collected in any quantity, especially in warm weather. Of this deposit more or less is always collected, especially where the service is direct from the river ; and although some of the Companies have reservoirs of such magnitude as to enable them to serve water partially purified by deposition, still the water is frequently supplied in a turbid state. In other cases the Companies' reservoirs, however eminently useful in oases of fire, become objectionable in regard to the purity of the water, since the mud accumulates in them, and also proportionately in the mains and branch pipes.

The greater number of complaints respecting the quality of the water have originated in the cause just alluded to. Some of the Companies have attempted to obviate the difficulty by suffering the water to remain at rest for a sufficient time to become clear before the public are supplied. In some instances they have so far succeeded as materially to improve their service. When, however, from land-floods, or other causes, the river is very thick, they cannot allow due time for such subsidence ; and even when most perfectly performed, the insects contained in the water, so far from being got rid of, become perhaps even more numerous. This is another just cause of complaint regarding the water, especially in hot seasons.

To obtain an effectual supply of clean water, free from insects and all suspended matters, the Commissioners have taken into consideration various plans for filtering the River Water through beds of sand and other materials ; and find that it is possible to filter the whole supply at a limited expense, and with such rapidity as not to interfere with the regularity of service.

Insects and suspended impurities only, are separated by filtration. Whatever substances may be employed in the construction of filtering-beds, the purity of the water, as dependant upon matters held in a state of solution, cannot be improved by

any practicable modification of the process. If, therefore, the water taken from the parts of the river whence the Companies draw their supplies is contaminated by substances dissolved, or chemically combined, the most perfect system of filtering can effect only a partial purification.

When the river was at its average state, the Commissioners directed portions of water to be taken from different parts of it, at different times of the tide, and especially from those parts whence the Companies draw their water, and also from situations higher up the river, where its quality could in no degree be influenced by the tide. To compare the state of the Thames water at London under different circumstances, they subsequently procured specimens from several parts of the river after an abundant fall of rain, and also others from places represented as particularly charged with impurities. A popular notion having prevailed that the water in the London Dock possessed peculiarly deleterious qualities, from an impregnation of copper, derived from the bottoms of ships, the Commissioners obtained portions of water from the dock taken at three different depths from the surface.

These specimens of water were analyzed by Dr. Bostock, "to ascertain how far the water of the Thames, contiguous to, or in the neighbourhood of London, is in a state proper for being employed in diet, and various other domestic purposes."

The general conclusion he deduces from the whole series of examinations, is expressed in the following passage of his Report:—

"It appears that the water of the Thames, when free from extraneous substances, is in a state of considerable purity, containing only a moderate quantity of saline contents, and those of a kind which cannot be supposed to render it unfit for domestic purposes, or to be injurious to the health. But as it approaches the metropolis it becomes loaded with a quantity of filth, which renders it disgusting to the senses, and improper to be employed in the preparation of food. The greatest part of this additional matter appears to be only mechanically suspended in it, and separates by mere rest. It requires, however, a considerable length of time to allow of the complete separation; while on account of its peculiar texture, and comminuted state, it is disposed to be again diffused through the water by a slight degree of agitation, while the gradual accumulation of this matter in the reservoirs must obviously increase the unpleasant odour and flavour of the water, and promote its tendency to the putrid state."

Regarding the greatest part of the extraneous matter in the Thames, as mechanically mixed with it, a variety of incidental circumstances will affect its quantity in the same situation, and under the same circumstances of the tide; but the observations are sufficiently uniform to warrant the Commissioners in concluding that the water is in the purest state at low tide, and the most loaded with extraneous matter at half ebb. It would appear, however, that a very considerable part, if not the whole of this extraneous matter, may be removed by filtration through sand, and still more effectually by a mixture of sand and charcoal.

The examination of the water taken from the London Dock showed that it did not contain the smallest appreciable quantity of copper.

From various inquiries respecting the state, purity, and general fitness for domestic use of Thames water, it appeared to be proved to the Commissioners, that the quality of water within the London district had suffered a gradual deterioration within the last ten or twelve years. This opinion is founded on the disappearance of fish from those parts of the river, and on the circumstance that the eels imported from Holland can now with great difficulty be kept alive in those parts of the Thames where they were formerly preserved in perfect health. Fishmongers in London also find it impossible to preserve live fish for any length of time in water taken from the same district.

The causes of these effects are perhaps principally to be traced to the increase of certain manufactories, amongst which those of coal-gas are the most prominent, polluting the river by their refuse;—to the constant passage of steam-boats, by which the mud is stirred up, and to the peculiar nature of that mud, within the above-mentioned precincts. The great abundance with which water is supplied to the houses and manufactories of the metropolis, appears to be essentially connected with the augmented impurity of the river; for where refuse animal and vegetable matter of various descriptions used to be collected, and from time to time removed for the purposes of manure, it is now indiscriminately washed into the sewers, and conveyed into the Thames, and the sewers themselves are rendered much cleaner than formerly, by the quantity of water which runs to waste, and which has rendered them less offensive, especially in those parts of the town, where they used to be most liable to stagnation, and consequent putrescence. The water of the river is more polluted immediately after heavy rains, which force down the contents of the sewers, than after a continuance of dry weather, when its course is sluggish or altogether arrested. The great increase in the population of London and of its suburbs on every side, must also be attended by a proportionate augmentation of extraneous matter carried into the Thames.

Other circumstances affect the fitness of the water, as now taken from the river for the supply of the town, such as the position of the suction pipes of the engines belonging to some of the Companies, in regard to the mouths of the sewers, and the quantity of dead animals and offal thrown into the river in and about London.

Statements have been made respecting the insalubrity of the water as supplied by the Companies. It is obvious that water receiving so large a proportion of foreign matter as the Thames, and so impure as to destroy fish, cannot even when clarified by filtration, be pronounced entirely free from the suspicion of general insalubrity; nor does there appear any grounds for assuming the probability of any improvement in the state of the water drawn from the London district of the river.

Although the principal supply of water by the New River

Company is not open to the same objectionable impregnations as that of the Thames, it is susceptible of much improvement. The occasional deficiency in quantity, which suggested the necessity of the engine at Broken Wharf, might be obviated by allowing a portion of that supply to be drawn from the River Lea, at Lea Bridge. But here the water is occasionally very muddy, receiving as it does the drainage of a considerable extent of country, in consequence of a right claimed by the proprietors of adjacent lands, and which the Company have at present no means of obviating; neither have they any power to prevent persons from bathing in their aqueduct.

The removal of these evils, together with the adoption of an extensive system of filtration, would materially contribute to the perfection of the New River supply. Great benefit would result if the inducement to bathe in the New River were superseded by the establishment of Public Baths, and it was stated in evidence that the New River Company have voluntarily offered to furnish sufficient supplies of water for a purpose of such general utility.

The Commissioners thus conclude their Report:—

“Taking into consideration the various circumstances to which we have now adverted, together with the details of evidence by which they are proved and illustrated, and also the facts derived from our own observation and experience, we are of opinion that the present state of the supply of water to the metropolis is susceptible of, and requires improvement. That many of the complaints respecting the quality of the water are well founded, and that it ought to be derived from other sources than those now resorted to, and guarded by such restrictions as shall at all times ensure its cleanliness and purity.”

#### XXIV. BILLS OF MORTALITY.

THE “Bills of Mortality” offer the only document for ascertaining the births and deaths, the duration of life, and the apparent causes of its termination, within the metropolis. The bills originally comprehended 109 parishes; in 1660 they were extended to 146; and that number is now divided into 97 parishes within the walls, 17 parishes without the walls, 29 out-parishes in Middlesex and Surrey, and 10 parishes in the city and liberties of Westminster. The great extension of London, since 1660, renders these bills exceedingly imperfect; for instance, the large parishes of St. Mary-le-bone and St. Pancras are not comprised in them. Again, the whole of the population within the parishes returned is not included in the bills; for the accounts of births and deaths amongst the Dissenters are wanting to render the returns complete. They are therefore only valuable as supplying a correct account of the births and deaths amongst a portion of the population of this large city; which account, having existed for two centuries, offers some curious points of comparison.

The classification of diseases, which is appended, is necessarily very unscientific and incorrect. It is founded upon the returns of sworn searchers, who, in the discharge of their office of viewing

first answer which is given them by the relatives of the deceased. But even these accounts offer some approximations to the truth. It is much to be desired that the Legislature would establish some better arrangements, by which this class of facts, so important in many ways, could be recorded with something like the same accuracy in our capital as in Paris.

*From December 13, 1826, to December 12, 1827.*

	Christened.	Buried.
In the 97 Parishes within the Walls .....	1022	1065
In the 17 Parishes without the Walls.....	4768	3646
In the 29 Out-Parishes in Middlesex and Surrey.....	19847	13512
In the 10 Parishes in the City and Liberties of Westminster.	4288	4069

### THE DISEASES AND CASUALTIES OF 1827.

DISEASES.		Flux . . . . .	11	Teething . . . . .	503
Abscess . . . . .	84	Gout . . . . .	40	Thrush . . . . .	72
Age, and debility	1724	Hæmorrhage . . . . .	51	Tumour . . . . .	21
Apoplexy . . . . .	417	Hernia . . . . .	46	Venereal . . . . .	4
Asthma . . . . .	955	Hooping cough . . . . .	767	Worms . . . . .	2
Bedridden . . . . .	2	Hydrophobia . . . . .	1	Total of Diseases	21911
Bile . . . . .	8	Inflammation . . . . .	2356		
Cancer . . . . .	115	Inflam. of the liver	136		
Childbirth . . . . .	270	Insanity . . . . .	273	CASUALTIES.	
Consumption . . . . .	5372	Jaundice . . . . .	43	Broken limbs . . . . .	2
Contraction of the heart	1	Jaw locked . . . . .	3	Burnt . . . . .	36
Convulsions . . . . .	2645	Measles . . . . .	525	Drowned . . . . .	134
Cow pox . . . . .	1	Miscarriage . . . . .	2	Excessive drinking	5
Croup . . . . .	124	Mortification . . . . .	345	Executed . . . . .	6
Diabetes . . . . .	3	Ossification of the heart	9	Found dead . . . . .	17
Diarrhoea . . . . .	16	Palpitation of the heart	18	Fractured . . . . .	1
Dropsy . . . . .	1075	Palsy . . . . .	34	Frighted . . . . .	1
Dropsy on the brain	763	Paralytic . . . . .	197	Frozen . . . . .	1
Dropsy on the chest	65	Pleurisy . . . . .	24	Killed by falls and	} 106
Dysentery . . . . .	13	Rheumatism . . . . .	38	other accidents	
Enlargem. of the heart	17	Scrofula . . . . .	9	Killed by fighting	3
Epilepsy . . . . .	29	Small pox . . . . .	616	Murdered . . . . .	3
Eruptive Diseases	24	Sore throat or quinsey	16	Poisoned . . . . .	3
Erysipelas . . . . .	20	Spasm . . . . .	55	Scalded . . . . .	7
Fever . . . . .	755	Stillborn . . . . .	936	Starved . . . . .	6
Fever, (Typhus) . . . . .	92	Stone . . . . .	23	Strangled . . . . .	2
Fever, intermittent or		Stoppage in stomach	22	Suffocated . . . . .	4
ague . . . . .	11	St. Vitus's dance . . . . .	1	Suicides . . . . .	44
Fistula . . . . .	4	Suddenly . . . . .	107	Total of Casualties	381

Christened { Males . . 15205 } 29925 | Buried { Males . . 11296 } 22292  
 { Females 14720 }

Whereof have died,

Under Two Years	6580	Thirty and Forty	1831	Eighty and Ninety	666
Betw. Two & Five	1875	Forty and Fifty . .	2134	Ninety & a Hundred	74
Five and Ten . . .	850	Fifty and Sixty . .	2128	A Hundred . . . . .	1
Ten and Twenty, .	862	Sixty and Seventy	2044	A Hundred & One .	1
Twenty and Thirty	1565	Seventy & Eighty	1680	A Hundred & Two .	1



## XXV. WEIGHTS AND MEASURES,

*Agreeably to the Act of Uniformity, which took effect 1st Jan. 1826 \*.*

THE term MEASURE is the most comprehensive of the two, and it is distinguishable into six kinds, viz. :—

Measure of	{	1. Length.
		2. Surface.
		3. Solidity, or Capacity.
		4. Force of Gravity, or what is commonly called Weight.
		5. Angles.
		6. Time.

The several denominations of these Measures have reference to certain standards, which are entirely arbitrary, and consequently vary among different nations.—In this Kingdom

The standard of	{	Length	is	a Yard
		Surface	„	a Square Yard, the $\frac{1}{4840}$ of an Acre
		Solidity	„	a Cubic Yard
		Capacity	„	a Gallon
		Weight	„	a Pound

The standards of Angular Measure, and of Time, are the same in all European, and most other, countries.

## 1. MEASURE OF LENGTH.

12	Inches	=	1 Foot
3	Feet	=	1 Yard
$5\frac{1}{2}$	Yards	=	1 Rod, or Pole
40	Poles	=	1 Furlong
8	Furlongs	=	1 Mile
$69\frac{1}{3}$	Miles	=	1 Degree of a Great Circle of the Earth.

An Inch is the smallest lineal measure to which a name is given, but subdivisions are used for many purposes. Among mechanics the Inch is commonly divided into *eighths*. By the officers of the revenue, and by scientific persons, it is divided into *tenths*, *hundredths*, &c. Formerly it was made to consist of 12 parts, called *lines*, but these have properly fallen into disuse.

\* In the Companion to the Almanac for 1828 was given a scientific Analysis of the Imperial Weights and Measures. In the British Almanac for 1829 are given the common Tables. The present article is a popular explanation of the Standards now in use.

*Particular Measures of Length.*

A Nail	=	2 $\frac{1}{4}$ Inches	} used for measuring cloth of all kinds.
Quarter	=	4 Nails	
Yard	=	4 Quarters	
Ell	=	5 Quarters	
Hand	=	4 Inches,	used for the height of horses.
Fathom	=	6 Feet,	used in measuring depths.
Link	=	7 Inches, 92 hundredths.	} used in Land Measure, to facilitate computation of the content, 10 square chains being equal to an Acre.
Chain	=	100 Links	

## 2. MEASURE OF SURFACE.

144	Square Inches	=	1 Square Foot
9	Square Feet	=	1 Square Yard
30 $\frac{1}{4}$	Square Yards	=	1 Perch or Rod
40	Perches	=	1 Rood
4	Roods, or 160 Perches	=	1 Acre
640	Acres	=	1 Square Mile

## 3. MEASURES OF SOLIDITY AND CAPACITY.

## DIVISION I.—SOLIDITY.

1728	Cubic Inches	=	1 Cubic Foot
27	Cubic Feet	=	1 Cubic Yard

## DIVISION II.

Imperial Measure of CAPACITY for all liquids, and for all dry goods, except such as are comprised in the third Division.

4	Gills	=	1 Pint	=	34 $\frac{2}{3}$	cubic inches, nearly
2	Pints	=	1 Quart	=	69 $\frac{1}{3}$	_____
4	Quarts	=	1 Gallon	=	277 $\frac{1}{4}$	_____
2	Gallons	=	1 Peck	=	554 $\frac{1}{2}$	_____
8	Gallons	=	1 Bushel	=	2218 $\frac{1}{2}$	_____
8	Bushels	=	1 Quarter	=	10 $\frac{1}{4}$	cubic feet, nearly
5	Quarters	=	1 Load	=	51 $\frac{1}{3}$	_____

The four last denominations are used for dry goods only. For liquids several denominations have been heretofore adopted, viz.:—For Beer, the Firkin of 9 gallons, the Kilderkin of 18, the Barrel of 36, the Hogshead of 54, and the Butt of 108 gallons. These will probably continue to be used in practice. For Wine and Spirits, there are, the Anker, Runlet, Tierce, Hogshead, Puncheon, Pipe, Butt, and Tun; but these may be considered rather as the names of the casks in which such commodities are imported; than as expressing any definite number of gallons. It is the practice to gauge all such vessels, and to charge them according to their actual content.

Flour is sold, nominally, by measure, but actually by weight, reckoned at 7lb. Avoirdupois to a Gallon.

## DIVISION III.

Imperial Measure of CAPACITY, for coals, culm, lime, fish, potatoes, fruit, and other goods, commonly sold by *heaped measure* :—

2 Gallons	= 1 Peck	= 704	cubic inches, nearly
8 Gallons	= 1 Bushel	= 2815 $\frac{1}{2}$	————
3 Bushels	= 1 Sack	= 4 $\frac{8}{9}$	cubic feet, nearly
12 Sacks	= 1 Chaldron	= 58 $\frac{3}{4}$	————

The goods are to be heaped up in the form of a cone, to a height above the rim of the measure of at least  $\frac{3}{4}$  of its depth. The outside diameter of Measures used for heaped goods are to be at least double the depth, consequently not less than the following dimensions :—

Bushel,	19 $\frac{1}{2}$ inches	Gallon,	9 $\frac{3}{4}$ inches
Half-Bushel,	15 $\frac{1}{2}$ —	Half-Gallon,	7 $\frac{3}{4}$ —
Peck,	12 $\frac{1}{4}$ —		

The Imperial Measures, described in the second and third Divisions, were established by Act 5 Geo. IV. c. 74. Before that time there were four different measures of capacity used in England :—1. For wine, spirits, cider, oils, milk, &c.; this was one-sixth less than the Imperial Measure. 2. For malt liquor, this was  $\frac{1}{59}$  part greater than the Imperial Measure. 3. For corn, and all other dry goods not heaped, this was  $\frac{1}{33}$  part less than the Imperial Measure. 4. For coals, which did not differ sensibly from the Imperial Measure.

The Imperial Gallon contains exactly 10 lbs. Avoirdupois of pure water; consequently the pint will hold 1 $\frac{1}{4}$  lb., and the bushel 80 lbs.

## 4. MEASURE OF WEIGHT.

## DIVISION I.—AVOIRDUPOIS WEIGHT.

27 $\frac{1}{2}$ Grains	= 1 Dram	= 27 $\frac{1}{2}$ grains
16 Drams	= 1 Ounce	= 437 $\frac{1}{2}$ —
16 Ounces	= 1 Pound (lb.)	= 7000 —
28 Pounds	= 1 Quarter (qr.)	
4 Quarters	= 1 Hundred Weight (cwt.)	
20 Hundred Weight	= 1 Ton	

This weight is used in almost all commercial transactions, and in the common dealings of life.

Particular weights belonging to this Division :—

		cwt.	qr.	lb.	
8 Pounds	= 1 Stone				used for Meat.
14 Pounds	= 1 Stone	= 0	0	14	} Used in the Wool Trade.
2 Stone	= 1 Tod	= 0	1	0	
6 $\frac{1}{2}$ Tod	= 1 Wey	= 1	2	14	
2 Weys	= 1 Sack	= 3	1	0	
12 Sacks	= 1 Last	= 39	0	0	

## DIVISION II.—TROY WEIGHT.

24 Grains	= 1 Pennyweight	= 24 grains
20 Pennyweights	= 1 Ounce	= 480 —
12 Ounces	= 1 Pound	= 5760 —

These are the denominations of Troy Weight when used for weighing gold, silver, and precious stones (except diamonds). But Troy Weight is also used by Apothecaries in compounding medicines, and by them the ounce is divided into 8 drams, and the dram into 3 scruples, so that the latter is equal to 20 grains.

For scientific purposes the grain only is used; and sets of weights are constructed in decimal progression, from 10,000 grains downwards to  $\frac{1}{100}$  of a grain.

By comparing the number of grains in the Avoirdupois and Troy pound and ounce respectively, it appears that the Troy pound is less than the Avoirdupois, in the proportion of 14 to 17 nearly; but the Troy ounce is greater than the Avoirdupois, in the proportion of 79 to 72 nearly.

The *carat*, used for weighing diamonds, is  $3\frac{1}{8}$  grains. The term, however, when used to express the fineness of gold, has a relative meaning only. Every mass of alloyed gold is supposed to be divided into 24 equal parts; thus the standard for coin is 22 carats fine, that is, it consists of 22 parts of pure gold, and 2 parts of alloy. What is called the *new standard*, used for watch-cases, &c., is 18 carats fine.

## 5. ANGULAR MEASURE;

OR, DIVISIONS OF THE CIRCLE.

60 Seconds	= 1 Minute
60 Minutes	= 1 Degree
30 Degrees	= 1 Sign
90 Degrees	= 1 Quadrant
360 Degrees, or 12 Signs	= 1 Circumference.

Formerly, the subdivisions were carried on by sixties; thus, the second was divided into 60 thirds, the third into 60 fourths, &c. At present, the second is more generally divided decimally into 10ths, 100ths, &c. The degree is frequently so divided.

## 6. MEASURE OF TIME.

60 Seconds	= 1 Minute
60 Minutes	= 1 Hour
24 Hours	= 1 Day
7 Days	= 1 Week
28 Days	= 1 Lunar Month
28, 29, 30, or 31 Days	= 1 Calendar Month
12 Calendar Months	= 1 Year
365 Days	= 1 Common Year
366 Days	= 1 Leap Year

In 400 years, 97 are leap years, and 303 common.

The same remark, as in the case of angular measure, applies to the mode of subdividing the second of time.

## PART III.

## USEFUL DIRECTIONS AND REMARKS.

## XXVI. MORTALITY OF INFANTS.

BEFORE the introduction of Vaccine Inoculation, more than a *fourth* of the children who were born in London died, *before they had attained their second year*. The proportion for 1827 was between a *fourth and fifth*, the numbers christened being 29,925, and those dying thus prematurely 6,580. This, we regret to observe, is an increase upon the returns of seven years earlier, 1820, by which it appears that a fifth so perished. The numbers fluctuate;—and the cause may perhaps be attributed to the prevalence of fevers and other contagious diseases at particular seasons. Upon an average of years, it would appear that about a fifth of the children born in the metropolis die before two years of age.

It is certainly not intended by Nature, that so large a proportion of the young of the human race should be thus cut off from life. The infancy of man is indeed a tender and helpless period, and one which requires the exercise of the most watchful care on the part of the mother. But the evils which naturally belong to it are infinitely aggravated by injudicious management—by unnatural methods of feeding and clothing—by the neglect of a due attention to cleanliness and exercise. From the moment that a child is born, a system of mismanagement begins, which, fortunately, it is now the earnest endeavour of medical men to reprove; but which still exists in almost all cases where the mother is either herself weak and ignorant, or surrenders her judgment to weak and ignorant nurses. We shall point out the chief of these evils, and offer, as we go along, a few hints for the adoption of a more reasonable course.

The first process which nurses were accustomed to pursue with a new-born child (and which many still continue), was to wash it, even in winter, with cold water. Spirits have been sometimes mixed with the water, or rubbed over afterwards; by which the violently painful sensation of cold is increased, by the increase of evaporation; and strong soap has been used, by which the skin is inflamed, and is rendered exquisitely painful to the touch for several days. It is necessary to wash the infant, but that should be done with warm water and a soft cloth, and the gentlest friction only should be employed.

The operation of dressing was formerly conducted with the same disregard to the feelings of the infant, as that of washing. A long roller was bound several times round the chest, and was usually so tightly applied, as to press upon and confine the ribs, and prevent that fair play of the lungs so necessary to the newly-established function of respiration. This bandage, in the use of which many nurses and mothers still persist, is a great cause of the flat sides and contracted chests which we see in after life; for the bones of infants are so soft that they yield and take a form

from very slight pressure. To prevent a new-born infant suffering from cold it requires to be clothed with all convenient speed; but its clothes should be made to fit on loosely, so as not to produce the smallest degree of pressure on any part of its limbs or body. The roller, that is commonly applied to confine the clothes round the chest, should on no account be used. The greater part of the infant's dress should consist of flannel, particularly the garment next the skin. A flannel cap is generally put upon the head; but this is an error, for the head should be kept as cool as possible, and the flannel cap, and perhaps all caps, should be discontinued.

The practice of giving new-born infants gruel, sugar, and butter, or medicine, is in all respects absurd and injurious. Some mothers and nurses even give the infant gin, which is absolute poison. Nature has provided both food and medicine in the sustenance which the mother affords. Some mothers and nurses had a ridiculous notion that two or three days ought to elapse before the infant should receive the food which nature has destined for it; and till that time arrived, it was drenched with pap, which filled its bowels with acidity, and produced flatulency and pain. Even this absurdity is not altogether exploded. Disease is the certain consequence of every attempt to substitute any food whatever for the sustenance of the mother. It is very rarely that the mother has not sufficient for the support of her infant, even within a few hours of its birth; the substitution, therefore, is as unnecessary as it is cruel.

But the great evil which the unhappy infant has to endure, in many cases, is when mothers, after they are perfectly recovered, persuade themselves, or are persuaded, that the child requires feeding;—that they have not adequate means for its support;—and that it may be supported by any other food than that which Nature has provided. Indolence, and a love of pleasure, sometimes suggest this fatal delusion to the rich;—ignorance, and a wish to be freed from a constant interruption to labour, lead the poor to a similar course. The result for the infant is, almost invariably, death, or diseases through life, which are worse than death. From the moment that the pap-spoon is constantly, and even occasionally, in the mouth of a child, and he is obliged to swallow all sorts of indigestible messes, as substitutes for the thin, light, easily-digestible fluid that Nature destined for him, sickness must necessarily follow. There is no escaping it; and one by one the unhappy victims swell the list of burials in every parish. The stages which lead to the grave are these:—

The bowels, which were before regular, become confined or loose;—flatulence, gripes, and acidities, are continually present; the child loses its rest, and is always crying; its belly enlarges; its skin becomes flabby and wrinkled; and its limbs have more the appearance belonging to age than to infancy, a sure sign that it is not nourished by the large quantities of food it is continually taking and ever craving for. Its limbs grow weak, and at the time it may be expected to walk, it is found unable to use its legs at all. The evil effects of an unnatural diet are generally increased by the injudicious attempts to remedy them by medicine. With

the poor, 'Dalby's Carminative,' or 'Godfrey's Cordial,' are at hand to procure a little rest for the sufferer, or *quiet for the nurse*; if these are wanting, porter or gin is added to its victuals for the same purpose. Others undertake to cure his gripes by purging, and for that purpose he is *poisoned* with calomel, an active preparation of *mercury*, which is given as though it was as harmless as so much chalk. A deprivation of air and exercise is generally added to the evils enumerated. It greatly aggravates the injury inflicted on the health by ill-judged feeding and neglect; and often causes, and always tends to confirm, the derangement of the functions of the stomach and bowels, from which most of the disorders proceed that originate in childhood, and which so often shorten and embitter life.

The great point to impress upon every mother is, that a child requires no other food than her milk, till it has four teeth. If, by a chance which rarely happens except amongst women who live luxuriously, the supply of the mother should not be adequate, or be deficient in quality of nourishment, assistance must be obtained. The milk of another woman, whose child is about the same age, should, if possible, be procured, as the best substitute for the mother's milk. If this cannot be obtained, asses' milk should be preferred to anything else; but, if neither of these are at hand, the food should consist of two parts of thin barley water or gruel, or arrow root made with water, and one part of cow's milk sweetened with a little white sugar: this mixture, if properly made, is very thin. Whether asses' milk, or this food, be used, the child should be made to suck it from a proper sucking bottle, the action of sucking being as necessary to the infant as chewing is to the adult. When the child has four teeth it may be furnished with more substantial food than can be procured from the mother;—and upon the appearance of the canine or eye-teeth it may be allowed animal food. But the stomach is best satisfied with the simplest viands; and any changes of diet, or provocatives to appetite, are perfectly unnecessary, and altogether injurious. Of salt (which, in some respects, is a provocation to appetite) children should be allowed to partake freely. It is almost universally the practice with those who have the care of children to deny them salt, under the mistaken idea that it makes them thirsty. To this mistake is to be attributed the prevalence of worms in the intestines of children. Salt is a preventive of this disease, and a grateful stimulant to the digestive organs.

Some children outlive the worst nursing;—and others, who may have been nursed upon rational principles, have their constitutions ruined at a later stage, by the false indulgence of their parents, who allow them fermented liquors, wine and beer, under the mistaken notion of supporting their strength. Others, again, are allowed to eat to excess the moment they can eat at all. The only secure direction for feeding infants is, that they should be kept slightly craving. When children have all their teeth, the necessity for this restraint in great measure ceases.

The directions given for dressing the infant in the first instance,

contain the principles that should be kept in view as it grows older. Its clothes should be so formed as to protect it from cold, and not to restrain the motion of its limbs, or to produce the effects of pressure on any part of the body. Great attention is necessary to be paid to keeping the body of an infant clean, which can only be done by regular washing, morning and evening. The napkins of infants, for an obvious reason, cannot be changed too frequently. We would lay great stress on the necessity of washing them twice a day. The great heat of their bodies, and the very tender and irritable state of their skin, render this absolutely necessary. When neglected, it is not surprising that the child should spend the night in crying; a complaint frequently made by those mothers and nurses who are careless on this subject.

Exercise is essential to well-being in every period of life; and in none more so than in the helpless state of infancy. No bounds can be assigned to which the exercising infants should be carried. If it be but of a nature proportioned to their strength, there is greater fear of their having too little than too much. As soon as a child is able to crawl, the restless activity with which Nature has endowed it will secure its enjoyment of all the advantages exercise can give it. It may be necessary, however, to observe, that during the winter it is hazardous to carry infants, unable to walk, into the open air.

We sum up these remarks by repeating their principal practical directions:—The food of the infant should be adapted to its age and growth; while it is without teeth it should live upon its mother's milk; when it has four teeth, it may be weaned, and fed on milk, with a little bread; as the number of its teeth increases, the solid part of its food should be increased; and when it has all its teeth it may be allowed animal food, and not before: the quantity of its food should be attended to as much as the quality; children require no change of food to stimulate their appetites: air and exercise cannot be secured to them too liberally: cleanliness and frequent washing are essential to their comfort; they should be clothed in flannel; and their clothes should fit them so loosely as not to produce the slightest effect of pressure.

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## XXVII. ON CLOTHING\*.

A VERY striking fact, exhibited by the Bills of Mortality, is the very large proportion of persons who die of *consumption*. The number for 1827 is 5372, being very nearly a fourth of the whole deaths of the year. It is not our intention to enter into any general remarks upon the nature of that fatal disease. In very many cases the origin of a consumption is an ordinary *cold*; and that cold is frequently taken through the want of a proper attention to clothing, particularly in females. We shall, therefore, offer a few general

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\* This paper is an abridgement, by the author, of an Essay in a periodical work of 1820.



remarks upon this subject, so important to the health of all classes of persons.

Nothing is more necessary to a comfortable state of existence than that the body should be kept in nearly an uniform temperature. The Almighty wisdom, which made the senses serve as instruments of pleasure for our gratification and of pain for our protection, has rendered the feelings arising from excess or deficiency of heat so acute, that we instinctively seek shelter from the scorching heat and freezing cold. We bathe our limbs in the cool stream, or clothe our bodies with the warm fleece. We court the breeze or carefully avoid it. But no efforts to mitigate the injurious effects of heat or cold would avail us, if nature had not furnished us, in common with other animals (in the peculiar functions of the skin and lungs), with a power of preserving the heat of the body uniform, under almost every variety of temperature to which the atmosphere is liable. The skin, by increase of the perspiration, carries off the excess of heat; the lungs, by decomposing the atmosphere, supply the loss:—so that the internal parts of the body are preserved at a temperature of about ninety-eight degrees, under all circumstances. In addition to the important share which the function of perspiration has in regulating the heat of the body, it serves the further purpose of an outlet to the constitution, by which it gets rid of matters that are no longer useful in its economy.

The excretory function of the skin is of such paramount importance to health, that we ought at all times to direct our attention to the means of securing its being duly performed; for if the matters that ought to be thrown out of the body by the pores of the skin are retained, they invariably prove injurious. When speaking of the excrementitious matter of the skin, we do not mean the sensible moisture which is poured out in hot weather, or when the body is heated by exercise; but a matter which is too subtile for the senses to take cognizance of—which is continually passing off from every part of the body, and which has been called the *insensible* perspiration. This insensible perspiration is the true excretion of the skin.

A suppression of the insensible perspiration is a prevailing symptom in almost all diseases. It is the sole cause of many fevers. The purgings that occur in hot weather are generally occasioned by it, and not by the fruits of the season, as is commonly supposed. Very many chronic diseases have no other cause. In warm weather, and particularly in hot climates, the functions of the skin being prodigiously increased, all the consequences of interrupting them are proportionably dangerous.

Besides the function of perspiration, the skin has, in common with every other surface of the body, a process, by means of appropriate vessels, of absorbing or taking up, and conveying into the blood vessels, any thing that may be in contact with it; it is also the part on which the organ of feeling or touch is distributed.

The skin is supplied with glands, which provide an oily matter that renders it impervious to water, and thus secures the evaporation of the sensible perspiration. Were this oily matter deficient,

the skin would become sodden, as is the case when it has been removed,—a fact to be observed in the hands of washerwomen, when it is destroyed by the solvent powers of the soap. The hair serves as so many capillary tubes to conduct the perspired fluid from the skin.

The three powers of the skin—perspiration, absorption, and feeling, are so dependent on each other, that it is impossible for one to be deranged without the other two being also disordered. For if a man be exposed to a frosty atmosphere, in a state of inactivity, or without sufficient clothing, till his limbs become stiff and his skin insensible, the vessels that excite the perspiration and the absorbent vessels partake of the torpor that has seized on the nerves of feeling, nor will they regain their lost activity till the sensibility be completely restored. The danger of suddenly attempting to restore sensibility to frozen parts is well known. If the addition of warmth be not very gradual, the vitality of the part will be destroyed.

This consideration of the functions of the skin will at once point out the necessity of an especial attention, in a fickle climate, to the subject of clothing. Every one's experience must have shown him how extremely capricious the weather is in this country. Our experience of this great inconstancy in the temperature of the air ought to have instructed us how to secure ourselves from its effects.

The chief end proposed by clothing ought to be protection from the cold; and it never can be too deeply impressed on the mind (especially of those who have the care of children), that a degree of cold that amounts to shivering cannot be felt, under any circumstances, without injury to the health; and that the strongest constitution cannot resist the benumbing influence of a sensation of cold constantly present, even though it be so moderate as not to occasion immediate complaint, or to induce the sufferer to seek protection from it. This degree of cold often lays the foundation of the whole host of chronic diseases, foremost amongst which are found scrofula and consumption.

Persons engaged in sedentary employments must be almost constantly under the influence of this degree of cold, unless the apartment in which they work is heated to a degree that subjects them, on leaving it, to all the dangers of a sudden transition, as it were from summer to winter. The inactivity to which such persons are condemned, by weakening the body, renders it incapable of maintaining the degree of warmth necessary to comfort, without additional clothing or fire. Under such circumstances a sufficient quantity of clothing of a proper quality, with the apartment moderately warmed and well ventilated, ought to be preferred, for keeping up the requisite degree of warmth, to any means of heating the air of the room so much as to render any increase of clothing unnecessary. To heat the air of an apartment much above the ordinary temperature of the atmosphere, we must shut out the external air;—the air also becomes extremely rarefied and dry, which circumstances make it doubly dangerous to pass from it to the cold raw external air. But in leaving a moderately well warmed room, if properly clothed, the change is not felt; and the full advantage of exercise is derived from any opportunity of taking it that may occur.

The only kind of dress that can afford the protection required by the changes of temperature to which this climate is liable, is woollen. Nor will it be of much avail that woollen be worn, unless *so much* of it be worn, and it be *so* worn as effectually to keep out the cold. Those who would receive the advantage which the wearing woollen is capable of affording, must wear it next the skin; for it is in this situation only that its health-preserving power can be felt. The great advantages of *Woollen cloth* are briefly these; the readiness with which it allows the escape of the matter of perspiration through its texture—its power of preserving the sensation of warmth to the skin under all circumstances—the difficulty there is in making it thoroughly wet—the slowness with which it conducts heat—the softness, lightness, and pliancy of its texture.

*Cotton cloth*, though it differs but little from linen, approaches nearer to the nature of woollen, and on that account must be esteemed as the next best substance of which clothing may be made.

*Silk* is the next in point of excellence, but it is very inferior to cotton in every respect.

*Linen* possesses the contrary of most of the properties enumerated as excellences in woollen. It retains the matter of perspiration in its texture, and speedily becomes imbued with it;—it gives an unpleasant sensation of cold to the skin;—it is very readily saturated with moisture, and it conducts heat too rapidly. It is, indeed, the *worst* of all the substances in use, being the least qualified to answer the purposes of clothing.

There are several prevailing errors in the mode of adapting clothes to the figure of the body, particularly amongst females. Clothes should be so made as to allow the body the full exercise of all its motions. The neglect of this precaution is productive of more mischief than is generally believed. The misery and suffering arising from it begin while we are yet in the cradle. When they have escaped from the nurses' hands, boys are left to nature. Girls have for awhile the same chance as boys in a freedom from bandages of all kinds; but as they approach to womanhood, they are again put into trammels in the forms of stays. The bad consequences of the pressure of stays are not immediately obvious, but they are not the less certain on that account; the girl writhes and twists to avoid the pinching, which must necessarily attend the commencement of wearing stays tightly laced; the posture in which she finds ease is the one in which she will constantly be, until at last she will not be comfortable in any other, even when she is freed from the pressure that originally obliged her to adopt it. In this way most of the deformities to which young people are subject originate; projecting shoulders and hips, and twistings of the back-bone have very rarely any other cause, and, unfortunately, it is not often that they are perceived until they have become considerable, and have existed too long to admit of remedy.

But these are minor evils; for though the deformity is in itself bad enough, it is not to be compared with the devastation that is made on the health, by the excessive pressure of the stays impeding

the functions of the stomach and bowels. The intestines of all animals have a motion similar to that by which the earth-worm moves itself forward, which enables them to force on their contents: it is called the peristaltic motion of the intestines. If this motion should cease, no nourishment could be conveyed into the body, and the bowels could not be relieved of the undigested remains of the food. If this motion be impeded, these processes are proportionably injured. Can it be supposed but that such considerable pressure must interrupt this necessary motion? That it does is pretty evident by the indigestions, flatulencies, pains in the sides, and sluggish bowels, with which many young women are more or less affected.

It is not enough that the stays are laced so tight as scarcely to leave room for women to breathe, but the mischief which such pressure would occasion is greatly increased, by a stiff piece of whalebone or steel introduced in front. When in a sitting posture, nature directs us for our ease to bend the body gently forwards; but to many women this indulgence, and the advantages of it, are denied. All females, particularly those who are engaged in sedentary employments, would do well to wear stays made of some soft and warm material, which would protect them from the cold, and afford a moderate support, such as might be worn without injury; and if they must wear bones or steel to stiffen them, to take care that they leave themselves full power to assume any posture that is conducive to their comfort.

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### XXVIII. INTEMPERATE USE OF SPIRITUOUS LIQUORS.

A COMMITTEE of the House of Commons, in their Report upon the Police of the Metropolis in the late Session of Parliament, express their belief that the increase of criminal commitments has partly been produced by the extremely low price at which spirituous liquors are sold. Since the reduction of the duties upon gin, the quantity of drunkenness in London, and we fear in most large towns, has certainly increased; and there can be no doubt whatever of the demoralizing effects of such a habit. The most effectual way to restrain the beginnings of this vice, is to point out the consequences to which it directly leads—consequences so affecting the health and happiness of mankind, that a reasonable person can only wonder that the temptation to a brief forgetfulness of real or imaginary ills is strong enough to produce an indifference to these certain and well-known results.

As this book will fall into the hands of many artisans who, from sedentary habits, and evil examples, are particularly open to the seductions of spirituous liquors, we reprint a passage from Dr. Willan's Reports on the Diseases in London:—

“On comparing my own observations with the bills of mortality, I am convinced, that considerably more than one-eighth of all

the deaths which take place in the metropolis, in persons above twenty years old, happen prematurely through excess in drinking spirits. These pernicious liquors are generally supposed to have an immediate and specific effect on the liver; which has been found after death, in drinkers of spirits, hardened or altered as to its texture, discoloured, and diminished. It appears, however, that the stomach and bowels suffer first from the use of spirits, and that their baneful influence is afterwards extended gradually to every part of the body, producing the following symptoms:—

“1st. Indigestion, attended with a disrelish of plain food; with frequent nausea, and oppressive pains at the stomach; together with an inexpressible sensation of sinking, faintness, and horror; with sudden convulsive discharges from the stomach into the mouth, of a clear acid or sweetish fluid.—2d. Racking pains, and violent contractions of the bowels. These symptoms often return periodically, about four o'clock in the morning, being attended with extreme depression, or languor, a shortness of breath, and the most dreadful apprehensions.—3d. In persons of a sanguine habit, tedious inflammations of the membrane which covers the bowels, producing intense pain, so that the slightest pressure on the belly cannot be endured.—4th. Swelling of the body, emaciation of the limbs, with frequent cramps; and pains of the joints, finally settling in the soles of the feet. These symptoms are succeeded by a degree of palsy, or, at least, an incapacity of moving the limbs with any considerable effect.—5th. Sallowness of complexion, with dryness and scalliness of the skin. As the powers of circulation are more and more impaired, the red vessels disappear from the white of the eye; the secretion of bile is imperfectly performed; and the small hairs of the skin fall off, leaving the surface, especially of the lower extremities, very smooth and shining.—6th. Jaundice and dropsical swellings of the legs, with general redness or inflammation of the skin, terminating in black spots and gangrenous ulcers.—7th. Ulcers in the mouth, throat, &c. and an offensive smell of the breath, similar to that of rotten apples.—8th. Profuse discharges of blood from the nostrils, stomach, bowels, kidneys, or bladder; and from the lungs, in persons of a consumptive habit.—9th. An entire change in the state of mind. At first, low spirits, strange sensations, and groundless fears, alternate with unseasonable and often boisterous mirth: a degree of stupidity, or confusion of ideas, succeeds. The memory, and the faculties depending on it, being impaired, there takes place an indifference towards usual occupations, and accustomed society or amusements. No interest is taken in the concerns of others; no love, no sympathy remains. Even natural affection to nearest relatives is gradually extinguished, and the moral sense seems obliterated. The wretched victims of a fatal poison fall, at length, into a state of fatuity; and die with the powers both of body and mind wholly exhausted. Some, after repeated fits of derangement, expire in a sudden and violent phrenzy. Some are hurried out of the world by apoplexies; others perish by the slower process of jaundice, dropsy, internal ulcers, and mortification in the limbs.”

## XXIX. TREATMENT IN CASES OF APPARENT DEATH.

SOME of the most common accidents by which many persons are hurried out of existence, such as drowning, suffocation by gases, and other casualties, often occur in places where it is impossible to procure immediate medical assistance. In these cases, a prompt use of a few simple remedies might probably save the lives of many valuable members of the community. The Humane Society has published some important directions in these matters, the substance of which appears very clearly stated in the following paper; which was drawn up by Mr. Aaron, a surgeon of Birmingham:—

### TREATMENT OF DROWNED PERSONS.

1. Remove the body on a plank or hurdle, with the head uncovered and elevated, to the nearest convenient place; or, if it be far to such place, first strip the body of the wet clothes, dry it carefully, and with as little rubbing as possible, and put on it some of the spare clothes of bystanders.

2. On arriving at the intended place, put the body in a room where there is a fire, lay a mattress, or folded blanket, on a table of convenient height, and, placing it near the fire, lay the body upon it, keeping the head and chest constantly elevated. Admit no more than six or seven persons, who will be quite sufficient for every necessary purpose.

3. Let part of these immediately begin to apply dry warmth in every possible way, such as hot bricks and bottles of hot water, wrapped in flannel, bags of hot sand, &c., to the soles of the feet, palms of the hands, armpits, &c., and hot flannels upon the body and limbs; while the others, at the same time, commence artificial respiration in the following manner:—

4. While one closes the mouth and one nostril, let another insert the pipe of a pair of bellows in the other nostril, and blow a moderate quantity of air gently into the lungs; the mouth and nostrils being then unclosed, the chest and pit of the stomach must be gently pressed, to expel the air; a fresh portion of air is then to be blown in again, and again expelled in the same manner. This must be continued, uninterruptedly, for three or four hours, if recovery does not take place sooner, before the attempt at restoration should be abandoned.

5. After this has been done a few times, rub the body and limbs of the person with a dry hand, or with dry warm flannels, but not so as to interfere with the process No. 4.

6. A glyster, with an ounce or two of table salt, and a little mustard, in half-a-pint (not more) of warm water, may be given.

7. Smelling salts, or the fumes of brown paper, or feathers burnt, may be passed under the nose occasionally, but not held there.

8. If recovery takes place, as soon as the person is able to swallow, some warm brandy, or wine and water, should be given at intervals, continuing the rubbing and artificial respiration till the

natural breathing is fully established, when the person should be put into a warm bed, be carefully watched for some time, and occasionally supplied with small quantities of light nutritious food. Fresh air should be allowed freely to enter the room.

N. B. If the accident has happened in the winter, and the body is frozen, warmth must be applied very gradually, as recommended in the treatment of persons exposed to intense cold.

#### TREATMENT OF PERSONS HANGED.

Remove the cord immediately, and proceed exactly as for a drowned person: except that medical assistance should be obtained, as soon as possible, to open a vein in the neck.

#### TREATMENT OF PERSONS SUFFOCATED BY NOXIOUS GASES.

If the body is yet warm, it should be freely exposed to a draught of fresh air; and cold water should be dashed over the head and chest. In other respects, it should be treated exactly as a drowned person. If the body is cold, warmth must be applied at first.

#### TREATMENT OF PERSONS EXPOSED TO INTENSE COLD.

1. Rub the body for a few minutes gently with snow, or melted ice, or if these cannot be had, with the coldest water that can be procured. Afterwards add small quantities of hot water, at intervals, to increase the warmth very gradually.

2. Use artificial respiration, and as soon as the person can swallow, give warm cordials, at first in very small quantities.

#### TREATMENT OF PERSONS IN A STATE OF EXCESSIVE INTOXICATION.

1. These persons should have all tight parts of their dress loosened, the head should be covered with a cloth wet with cold water, and vomiting should be excited as quickly as possible, either by an emetic, or if the person cannot swallow, by tickling the throat with a feather, or the finger.

2. Glysters of salt and water should be given, and the person kept in the upright posture; and the head, on no account, be allowed to hang down. If recovery does not take place soon, mustard poultices should be applied to the feet; and if the extremities become cold, warmth and friction should be perseveringly used."

NOTE.—It may be essential to add that the lives of persons apparently dead are sometimes wholly placed beyond the power of restoration, by the injudicious treatment of those who witness the accident. A very common error is to shake the body of a drowned person violently, or to hold it up by the feet. The use of all the remedies employed in cases of drowning is to excite the action of the lungs, the suspension of which action is the cause of death. To hold a body up by the heels is, of all other positions, the most calculated to prevent the lungs being again put in motion; and the practice has, we doubt not, often produced that death which it was intended to avert.

### XXX. ON ECONOMY IN THE USE OF BREAD, AND FLOUR.

IN the spring of the present year, a voluminous Report was presented to Parliament by an agent of Government, Mr. Jacob, on the State of Agriculture in Europe, and on the Trade in Corn. One of the most important matters in that Report related to an alleged general deficiency of the stock of Bread-Corn in Europe; which deficiency had principally arisen from the increase of cultivation not having kept pace with the increase of population. In this country, the great improvements in agriculture have enabled us to provide for an increase in the number of inhabitants, amounting by computation to sixteen per cent. in ten years, without deriving much assistance from the foreign corn-markets. It has, however, been pretty clearly ascertained that the *stock* of corn on hand,—that is, the surplus remaining after the consumption between harvest and harvest,—has been gradually diminishing, till it has become nearly exhausted.

If these alleged circumstances be correct, and we have no reason to doubt their accuracy, the people of this country must rely almost entirely upon the produce of the late harvest for the principal necessary of life, till the period of the next harvest arrive. There is reason to believe that the crop of the present year was a short one;—nearly a fifth of that crop will, of necessity, be required for seed;—and it is probable that we shall be unable to obtain corn from abroad, except at very high prices. In France, measures have already been taken by the government to prevent exportation.

With the probabilities before us, derived from these facts, of the price of bread being considerably advanced during the next seven or eight months—for the price will be regulated by the supply—it becomes the positive duty of every family, whether rich or poor, to diminish the consumption of flour and bread in every possible way. An evil foreseen is half averted; and the worst effects of such an evil as that of a scarcity of wheat, may be almost entirely prevented, if the foresight produce prudence and economy. But this frugality must be begun in time. If the heads of families, and of public institutions, delay their economy till bread become frightfully dear, they may be compelled to endure a positive privation, instead of submitting to a trifling change in their usual modes of living. That we may assist, as far as possible, that disposition to economy which must be produced by a careful consideration of this subject, we shall collect, from various sources, some general observations on the duty of saving,—offer a few practical hints for economy in the use of bread and flour,—and supply an account of the best substitutes for these important articles of food.

In 1799, which many will still remember as a year of great privation, the attention of all classes was directed to the important subject of this species of economy. The late Bishop of Durham, a very benevolent prelate, then addressed a circular letter to the



magistrates of the county Palatine of Durham, containing a great deal of wholesome advice to the rich as well as to the poor. The following passages appear to us deserving of the most careful attention :—

“ A long series of wet and unseasonable weather has greatly affected the crops of corn this year, particularly in the northern counties, and in some other parts of England, where the coldness of the soil, and the humidity of the atmosphere, are unfavourable to the ripening of wheat. I therefore conceive it to be the duty of the other classes of society in this kingdom to take speedy and effectual measures for diminishing and preventing, as far as lies in their power, the distress which the poor might otherwise be subjected to, in the course of the ensuing winter, from the scarcity, and consequent high price, of a very material article of life to all, but especially to them. Far from apprehending any alarm or inconvenience from the adoption of proper measures to alleviate this impending evil, it appears to me that the best method of preventing anxiety, and of quieting the minds of the poor, will be for the rest of their fellow-subjects to take immediate steps for their relief. When the cottager finds the charitable and Christian care of his more opulent neighbours anticipating his wants, and providing for his comforts, it is impossible but his apprehensions must be lessened, at the same time that his good habits and orderly dispositions will be augmented.

“ In addressing you upon this subject, I think it necessary to mention a common error, with regard to the relief of the poor in times of scarcity ; and to state to you, in strong and unqualified language, that whenever the produce of a country and the quantity of food are insufficient for *all* the inhabitants, nothing less than an additional supply of food from abroad, or an *improved economy in the use and application of it*, can give substantial relief. We deceive ourselves, and rather do prejudice than afford assistance to the general condition of the poor, by attempting to relieve them in any other way. There is nothing more benevolent in intention, more plausible in theory, or more desirable in effect, than, upon a scarcity, that the contributions of the wealthy should supply a fund for purchasing bread and meat, to be given to *all the poor of every description* ; and to be distributed with such bounty and impartiality as to relieve *all* their distresses. But, however abundant the funds of charity might be, the experience of a short time would prove that such a well-meant, but unadvised plan could only increase the scarcity, and enhance the price of provisions, to the essential injury of the poor, as well as of all the other inhabitants of the country ; and that, while it was affording a momentary supply, it must operate to diminish prematurely the common stock, and, with it, the means of subsistence, not only of the other classes, but of the very persons whose benefit and support was the great object in view.

“ In the improved management of those means of subsistence which Providence hath bestowed upon us, much is to be done for the well-being and increased comfort of the poor ; and in this, as

in every thing else, a large portion of the operative effect of precept and exhortation will depend upon the efficacy of example. The indiscriminate praise of hospitality and generosity is frequently given to wasteful habits in the houses of the opulent. In plentiful seasons, such unmerited commendation may pass unnoticed and uncensured; but, during periods of scarcity, when the pressure of distress bears heavy on the needy and the destitute, I would request all the other orders of society to consider how much injury they may do to their necessitous brethren by actual waste, and by pernicious example;—I would request them to consider that, when the means of subsistence are barely adequate to the demands of population, every portion of food that is wasted within their houses occasions the privation of the support of life to one at least of their fellow-creatures.

“ It is on this principle that I earnestly recommend in private houses, and also in all public establishments, the economy of food, particularly in the use of wheat, which the habits of the English cottager have now made so necessary an article of life. Other individuals, and those who are maintained in public establishments, do, in general, possess more variety, and a greater proportion of nourishing food, than the cottager, and can therefore with more facility and less self-denial adopt the use of other substitutes for wheat flour; and their example will be of incalculable service in reconciling the cottager to that which is at present essential to his own welfare.”

It would be difficult to add any general remarks to these very judicious and forcible observations, which are conceived in the true spirit of benevolence, regulated, as all benevolence ought to be, by sound discretion.

One of the most essential rules in the economy of bread, which it would be well to practise *at all times*, is, *not to eat new bread*. New bread may be agreeable to some persons, but it is most unwholesome, and does not afford by any means so much nourishment as bread two or three days old. In the scarcity of 1799, bakers were wisely prevented selling bread that was not twenty-four hours old.

Amongst the most useful and nutritious substitutes for wheat, and which has the advantage of correcting the unwholesome properties of bad flour, is *rice*. During the scarcity of wheat in July, 1795, one of the measures adopted at the Foundling Hospital, with a view of lessening the consumption of flour, was the substitution of rice puddings for those of flour; which, by the table of diet, were used for the children's dinner twice a-week. The flour puddings, for each day, had taken about 163 lb. weight of flour; the rice puddings, substituted in their place, required only 21 lb. of rice, to make the same quantity of pudding; the result of the experiment being that, in a baked pudding made with milk, one pound of rice will go very nearly as far as eight pounds of flour.

Rice contains a great deal of nutriment in a small compass, and does not pass so quickly off the stomach, as some other substitutes for wheat-flour do. It is a good ingredient in bread. Boil a quarter

of a pound of rice till it is quite soft; then put it on the back part of a sieve to drain it; and when it is cold, mix it with three-quarters of a pound of flour, a tea-cupful of yeast, a tea-cupful of milk, and a small table-spoonful of salt. Let it stand for three hours; then knead it up; and roll it in about a handful of flour, so as to make the outside dry enough to put into the oven. About an hour and a quarter will bake it; and it will produce one pound fourteen ounces of very good white bread. It should not be eaten till it is two days old.

The general use of that most valuable root, the potatoe, renders any observations upon its qualities quite unnecessary. It must not, however, be imagined, that potatoes contain the same nutritive powers as bread, weight for weight. It has been estimated, as the result of experiments by two French chemists, MM. Percy, and Vauquelin, that one pound of *good* bread is equal to two pounds and a half or three pounds of potatoes; and that 75 pounds of bread, and 30 of meat, are equal to 300 pounds of potatoes. Potatoes are superior in nutriment to turnips and carrots—three parts of turnips, or two of carrots, being equal to one of potatoes.

Large quantities of potatoes are wasted in many families by bad modes of cooking them. In Lancashire they are generally admirably dressed;—and there, contrary to the practice in the Southern parts of England, they are first peeled. The larger potatoes are cut in pieces of the same size as the smaller ones, so that they may boil equally; a little salt is thrown into the water before it begins to boil; when they are done thoroughly the water is poured from them; and the saucepan is placed for a very short time on the fire to dry them, and that all may be equally dried, the pan is shaken, that those at the bottom may be brought to the top.

The following are Count Rumford's directions for boiling potatoes;—which differ materially from the preceding, in the circumstance that the root is neither pared nor scraped before boiling:—

“The potatoes should be, as much as possible, of the same size, and the large and small ones boiled separately. They must be washed clean, and, without paring or scraping, put in a pot with cold water, not sufficient to cover them, as they will produce themselves, before they boil, a considerable quantity of fluid. They do not admit being put into a vessel of boiling water, like greens. If the potatoes are tolerably large, it will be necessary, as soon as they begin to boil, to throw in some cold water, and occasionally to repeat it, till the potatoes are boiled to the heart, (which will take from half an hour to an hour and a quarter, according to the size;) they will otherwise crack, and burst to pieces on the outside, whilst the inside will be nearly in a crude state, and consequently very unpalatable and unwholesome. During the boiling, throwing in a little salt occasionally is found a great improvement; and it is certain that the slower they are cooked the better. When boiled, pour off the water, and evaporate the moisture, by replacing the vessel in which the potatoes were

boiled once more over the fire. This makes them remarkably dry and mealy. They should be brought to table with the skins on, and eaten with a little salt, as bread."

There are various modes of applying potatoes in cookery, which may economize the use of flour. An excellent dish, for instance, is made by forming the crust of a sort of pasty with mashed potatoes. To do this effectually, a tin pan should be made with a false bottom full of small holes, like a colander, from which proceeds a tube of about six inches in height. Meat of any sort is placed at the bottom of the pan, salted and peppered, and covered with a little water. The false bottom is then put upon its ledges, which are about two inches from the real bottom, and upon this the mashed potatoes are heaped till they fill the whole dish. When baked, enough of the steam from the meat ascends through the small holes into the potatoes, to make them savoury; and the rest of the steam is discharged by the pipe which runs through to the top of the dish.

It will be sometimes found economical to bake bread at home. This will be in cases where remoteness from towns may render its manufacture cheaper than its purchase. Generally, to manufacture an article at home is *not* to economize—because the saving produced by the division of labour is not obtained. If the flour is new, after a wet season, carbonate of ammonia, of a pure quality, dissolved in warm water, and introduced into the dough when stiff, will remove all unpleasant effects, and make the bread quite light. The quantity required is 1oz. to 14lbs. of flour.

The weight of bread is considerably increased, by using bran water in kneading the dough. Three pounds of bran, boiled for an hour, is the proportion for 28lbs of flour.

The following is a plan for introducing potatoes into wheaten bread:—Boil five pounds of potatoes well, then dry them over a fire or in the oven until they fall to pieces and become flour, which they will do, if properly managed; then make of them a batter, of the consistency of thick gruel: strain this through a coarse sieve or colander, then mix this, instead of water, with twenty pounds of flour. If the yeast be good, the bread thus made will be as light and agreeable as that made of all flour.

We have thus offered a few plain observations which may tend at all seasons to advance the great object of frugal house-keeping, and may be of national benefit in times of dearth. It is possible that there may be no real causes for apprehending a great deficiency in our supply of wheat; but it must produce advantage to economize in the use of this, or any other necessary of life.

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### XXXI. ESTABLISHMENTS IN HOLLAND FOR THE RELIEF OF MENDICITY.

THE public attention of Europe has of late been directed to some novel and very interesting establishments in Holland, which have acquired the name of "Pauper Colonies." The object of these institutions is to remove those persons who are a burden to society, to the poorest waste lands, where, under judicious regulations, they have been enabled to provide for their own subsistence. The best account that we have seen of these establishments has been published by Mr. Jacob, the reporter on the Corn trade.

Of the Pauper Colonies, the one which Mr. Jacob selects for illustration, is that of Fredericks Oord. The originator of this scheme was General Van den Bosch. The general, while in the island of Java, had formed a connexion with a Chinese mandarin, whose skill in farming he had admired, and who had under him a colony of emigrant Chinese. On his return to Europe, General Van den Bosch laid before the King of the Netherlands a plan for a pauper establishment, which at once met with the royal patronage. A public meeting was held at the Hague in 1818, and a Society of Beneficence formed, and two committees organized for its management. The first, or Committee of Beneficence, consists of twelve members,—or a president, two assistants or assessors, and nine members, one of whom acts as secretary. The president was appointed for life, the assessors annually, but capable of being re-elected; and the president was Prince Frederick, the second son of the king. The members form four sub-committees; finance, instruction, correspondence, and general purposes; the first and second having each an assessor for chairman, and the others choosing their own.

The second committee, or Committee of Superintendence, consists of twenty-four members, who elect their own president and secretary. This committee examines and audits the accounts, and watches the expenditure and operations of the society.

Having received the sanction of the king, the society was recommended to all the local authorities, and soon found itself in possession of 5380*l.*, obtained from more than 20,000 members. With these funds, having been enabled to make the necessary arrangements, the society purchased the estate of Westerbech Slood, on the east side of the Zuyder Zee, and not far from the town of Steenwyk. This estate cost them 4,660*l.*; and it contained from 1200 to 1300 acres, about 200 of which was under a sort of culture, or covered with bad wood, and the rest a mere heath. They let the cultivated land, about one-tenth of the whole; deepened the Aa (which runs through the estate), so that it is navigable for boats, and built store-houses, a school, and dwellings for about fifty-two families, of from six to eight persons each. Their operations were begun in September, 1818; by the 10th of November the houses were ready; and the communes sent some poor families.

The total expense of each family, in English money, was as follows:—

	£	s.	d.
Building each house . . . . .	41	13	4
Furniture and implements . . . . .	8	6	8
Clothing . . . . .	12	10	0
Two cows, or one cow and ten sheep . . . . .	12	10	0
Cultivation and seed, first year . . . . .	33	6	8
Advances in provisions . . . . .	4	3	4
Advances of other kinds . . . . .	4	3	4
Flax and wool to be spun . . . . .	16	13	4
Seven acres uncultivated land, net . . . . .	8	6	8
Total establishment . . . . .	£141	13	4

This estimate is between 22*l.* and 23*l.* for each individual, and they are expected to repay it to the society in rent and labour, besides maintaining themselves, in about sixteen years. Each allotment of seven acres is laid out in a rectangle, having the house toward the road with one end, and the other reaching fifty feet into the allotment. The dwelling occupies the part next the road, then comes the barn, after that the stalls for the cattle, and behind these the reservoir for manure, in which every particle of vegetable and animal refuse is carefully made up into compost, with the heath and moss of the land; the preparation of this compost being one of the most essential of their labours. The colonists are subjected to a kind of military regulation, all their work being done by the piece; they assemble at six in the morning in summer and winter, and those who do not answer to their names at the roll-call, get no wages for the day. When the labour of the day is over, each receives a ticket stating the amount of wages; and for that he may procure food from the store at fixed rates. Those who are at first unable to support themselves, obtain credit for a short period. The women spin, weave, and knit, at first from purchased wool and flax, but as soon as possible from the produce of their own flocks and fields. A day and a half's work every week is allowed for the support of the sick, the infirm, and those who are not fit for labour; and for this, those who work are allowed one shilling per day in summer, and eightpence in the winter. The whole of the necessaries and appointments are regularly inspected with military care, and such as have been wasteful are obliged to make good what they have destroyed. It will be borne in mind, that the whole stock out of which each family of seven or eight persons is to find support, and, if they can, effect some savings, is the stock of 141*l.* 13*s.* 4*d.*, and the seven acres of waste land, which is of a description not the most susceptible of cultivation. The careful preparation of manure, the most remarkable feature in Chinese husbandry, is the grand resource; and the result is most encouraging, as an example of how much regularity and perseverance may effect with small means. As the preparation of manure is still very imperfectly understood in this country, and as many families throw away what constitutes with these colonies the elements of prosperity, we

give some details from Mr. Jacob's book, the utility of which must compensate for their homeliness.

When the house and barn are built, the soil formed, by mixing sand and clay, to a consistence which makes it sufficiently retentive of moisture, the land manured, dug, and one crop sowed or planted on it, then a family, consisting of from six to eight persons, is fixed on it at an expense, as before stated, of 141*l.* 13*s.* 4*d.* To enable this household to subsist, to pay the rent, and to save something, it is necessary that very intense manuring must be persevered in. The directors therefore require, and by their enforcement of the prescribed regulations, indeed, compel each family to provide sufficient manure to dress the *whole* of the land every year. For this purpose each household must provide itself with three hundred fodder of manure, yearly; or, in English terms, one hundred and fifty tons, or at the rate of more than twenty tons to each acre. When it is considered that few of our best English farmers can apply one half that quantity of manure, it will not appear wonderful that seven acres should be made to provide for the sustenance of the same number of persons, and leave a surplus to pay rent and to form a reserve of savings. On each farm the live stock of two cows, or one cow and ten sheep, to which may be added pigs, would not nearly enable the cultivator to manure his small portion of land once even in four or five years.

It hence becomes necessary to form masses of compost, the collecting the materials for which forms the greater part of the employment of the colonists. These masses are created almost wholly by manual labour, of that kind which, but for such an application of it, would be wholly lost to the community. As straw is at best, in the early period, not abundant, and as that from the corn must at first be chiefly used as food for the cattle or for covering to the houses, other materials, which the heaths furnish, are resorted to in order to make beds for the cattle. The heath land is pared, but the operation is to cut with the spade a very thin slice of the earth, and not to the bottom of the roots of the plants, that they may, as they soon will do, shoot again; the parings are not only made thin, but in narrow strips or small spots. Thus but little soil is taken away, and the roots, though cut, are not all of them destroyed; the parts that are left bare are protected from being too much dried up by the sun and wind, and the seed of the ripe heather is scattered over the spaces left bare near them, and soon bring forth the same plants.—By this operation there is a constant succession provided of healthy material.

This paring for the heath is a joint operation performed by the men in a kind of military lines. The society pays each for the work he performs, and when the average cost is ascertained, the sods are sold to the several households at the same price, and are carried to their respective farms in small one-horse carts, which are kept by the society for that, and for similar purposes, to which mere manual labour cannot be so beneficially applied. When

these sods are dried and conveyed to the barns of the colonists, they are piled in a kind of stack, and portions of it are pulled out, not cut out, to ensure their being broken into small fragments. With these the bedding of the cows or sheep, as the case may be, is formed.

The use of bog turf or peat as one of the materials of compost is not approved. It impedes the process of fermentation, which is the most important part of the preparation of the heaps of manure. Another expedient is therefore adopted, by paring the second year's grass land, whether of clover, ray grass, or fiorin. These clods, containing a proportion of the roots of the plants which have been before harvested from them, and much garden mould, become useful auxiliaries to the heathy turf, and spare the use of that material which, if solely applied, would require almost as much land to supply it as the farm itself.

The bedding of the cattle with fresh material is performed every morning and evening, and remains under them seven days and nights, when it is wheeled to the dunghill. Each morning that which lies near the hinder part of the cow is thrown forward, and the part towards its head takes its place, and fresh heather, about a quarter of a fodder, or two hundred and fifty pounds, added to the bedding; the same is also done every evening. The sheep and pigs are only supplied with fresh heather once a day. It is reckoned that ten sheep make an equal quantity of dung with one cow. It must be obvious to every one that the changing and consequent turning over thirteen times must make the mixture of the animal and vegetable substances more equably rich; and the uniform treading of it must break it into small particles and give greater scope to the fermentative putrefaction.

Each week the stalls are cleaned, and the dung conveyed to the place appointed at the back of the barn. This is of a round shape, from three to four feet in depth. The bottom and sides are walled with either clinkers or turf, and made water-tight. It is commonly from twelve to fourteen feet in diameter, and sufficiently capacious to contain the dung made by the cattle in the course of four weeks. The mass is thus composed of portions which have remained from four weeks to one day, over which the ashes from the household and all the sweepings of the premises are strewed. Adjoining to the dung-heap is the reservoir, into which the drainings of the stalls are conveyed. Equal care is taken that every other material for compost is preserved. In England, little attention is paid to these matters; and even in agricultural districts, many of the most valuable ingredients for fertilizing the earth (soap-suds, for instance) are constantly thrown away. This cesspool containing about a hogshead, is never allowed to run over; and if it has not rained, is every other day filled up with water, and then with a scoop taken up and sprinkled over the heap of dung. As this heap contains four weeks' dung, or thirty fodder, or fifteen tons, the administering fourteen such portions of rich fermenting matter must vastly enhance the value of the whole for the purposes of vegetation.



At the end of the fourth week the dung-hole (called locally the gierback) is emptied, and its contents thus again turned over, the most putrid parts being by this means brought to the top; it is formed into a heap from three to five feet high, and carefully covered with sods; by this covering the fermentative heat is prevented from evaporating, and the rain water is kept from the mass, into which, if it penetrated, it would check fermentation. When the heap has lain and fermented during one, two, or three months, it is carried to the field which is to be manured with it. The covering of sods is separated from the heap, and carried to the dung hole, where it is laid at the bottom of the next monthly accumulation, and imbibes with it an equal proportion of vegetative force.

These details will not be considered of little importance, in a country like ours, where there is still much waste land to be cultivated, and many idle and wretched members of society to be supported. The mode of rendering poor land fruitful is by the application of manure. This is the moving power to be applied to cultivation; it is to agriculture what water, wind, or steam is to mechanics.

The following are the sums of produce and expenditure for each family, for one year:—

Total produce . . . . .	£47 15 0
Expenses, including rent, (about 12s. an acre)	39 11 8
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Surplus each year . . . . .	£8 3 4

The desire of gain, and the approbation of the superintendents, are, in general, found to be sufficient encouragements both to industry and good conduct. When these are not enough, forfeiture of privileges, confinement, and hard labour are resorted to. There are also badges of honour—medals of copper, silver and gold. Those who have the copper medal, may leave the colony on Sundays without asking leave; the silver is given to those who have made some savings, and they are allowed to go beyond the colony in the intervals of labour on working-days; and when they are entitled to the gold medal, by having shewn that they clear 20*l.* 16*s.* 8*d.* a-year by their labour, they are free tenants, and released from all the regulations of the colony. These privileges may, however, be suspended for offences.

In the course of seven years from its first establishment, the colony of Fredericks Oord contained a population of 6778, including that of Omme Schanze, which is under a more rigid control. Among the number were 2174 orphans and foundlings. The total number forming all the colonies in Holland were stated to Mr. Jacob at 20,000, but he thinks it exaggerated: there were, however, 8,000 in North Holland. Every attention is paid to the education of the young.

## XXXII. SAVINGS BANKS.

THE establishment of Savings Banks is one of the greatest benefits that has been conferred upon the labouring classes of this country. From the years 1817 to 1828 inclusive, the Commissioners for the Reduction of the National Debt received from the Directors of Savings Banks, including Friendly Societies, the sum of 13,746,546*l.* for which interest was paid by Government at the rate of 4 per cent. It will readily be perceived that a great portion of this large sum of money must have been *saved* by the retrenchment of some superfluous expenditure. Banks for Savings have enabled the smallest deposits to be securely preserved to the poor man, with the same sort of advantage which the rich derive from their money, that is, *interest*. There is therefore every inducement to make an effort to save, and a frugal expenditure will enable almost every one to save something. Dr. Franklin observes, in his usual forcible way, that "six pounds a year is but a groat a day. For this little sum (which may be daily wasted, either in time or expense, unperceived) a man of credit may, on his own security, have the constant possession and use of an hundred and twenty pounds." This refers to the borrowing of capital for purposes of trade;—and many humble men, who have acquired the habit of saving the groat a day have risen to wealth from such small beginnings. Many, however, continue to spend the groat unnecessarily, and are always poor.

But it is not essential for a man to be engaged in trade, which requires the use of capital, to make it desirable for him to lay by something out of his earnings. The possession of a small sum of money beforehand conduces very much to substantial comfort and independence. However small may be a man's income, there is one certain way of increasing it—that is by frugality;—and frugality, commenced early in life, will prevent nearly all the miseries and degradations that invariably accompany improvidence. The habit of saving is not only valuable in itself, but it leads to habits of sobriety, order, and general good conduct;—and these habits will not only enable a man to enjoy life with more zest, and to live longer, than the short and dearly-bought gratifications of sensual indulgence, but will ensure him to pass through the world with the approbation of his own conscience, and to leave it with that inward peace which is the best reward of virtue.

A learned and benevolent clergyman of the Church, who has been lately raised to the dignity of a Bishop, has pointed out the practical advantages of early savings in a very forcible manner. The following is an Extract from "Records of the Creation," by the Rev. J. B. Sumner, now Bishop of Chester:—

"Supposing a prudential system so far established that the average period of marriage should be twenty-five, it might easily be within the power of the lowest classes to secure a provisional support for a family, more independent than the parish allowance, and

more regular than the operation of private charity. The wages of husbandry, including the additions of harvest time, may be averaged at 12*s.* per week from the age of eighteen. Half that sum is amply sufficient for the support of a single man. This would leave an overplus of 6*s.* per week for seven years. But to avoid any appearance of overstating the facts, and to allow for lost time, we will only take 4*s.* or 10*l.* per annum, which, if regularly laid up, would, with interest, make 80*l.* by the age of twenty-five. Allow the mechanic to work for himself at 21*s.*, his higher rate of wages will enable him to save 10*s.* weekly, or 21*l.* per annum. The careful application of this surplus will make him worth the same sum at twenty-five. It is probable, that, by similar habits, the wife may contribute such a share of capital as will supply the cottage with its humble furniture. At all events they will live without difficulty, even without further saving, for four or five years: the interest of former savings paying the rent, and thus removing the necessity of those extraordinary exertions which, in the way of task-work, sometimes undermine the constitutions of the industrious poor. If the family increases after this time, difficulties will increase. This is the period of a labourer's life which it is hardest to encounter, from his thirtieth to his fortieth year: former savings, therefore, may now be drawn upon. Let 5*s.* per week be taken for the four dead months of the year, and suppose this to be continued for ten years, the capital will only have lost 40*l.* From that time the children contribute their share, the family ceases to be a growing burden, and there remains a stock towards setting forward the children in life, or to supply some of the numerous wants of increasing years. Were these habits general, how little comparative distress would the appearance of society exhibit. Only those distresses would meet our view which are the common lot of all ranks and conditions."

An act was passed in the last Session of Parliament for the further Regulation of Savings Banks. It was found necessary to reduce the rate of interest to 3*l.* 8*s.* 5½*d.* per cent. per annum, or 2½*d.* per cent. per day. This is the same rate of interest which is paid upon Exchequer Bills. The regulations which this act contains are drawn up with great care, and effectually provide for the security of the Depositors. As many of the enactments are new, we subjoin a copy of the Rules of the St. Pancras Savings Bank, which may offer a model for similar establishments. The most important clauses of the act itself will be found at p. 174.

1. **MANAGEMENT.**—This Bank is under the Management of a President, Vice-Presidents, Trustees, and not less than Fifty Managers, none of whom are permitted to derive any benefit whatsoever, directly or indirectly, from the Deposits received, or the Produce thereof. One or more of the Managers attend when the Bank is open for business.

2. **SUPERINTENDING COMMITTEE.**—A Committee of not less than Ten Managers, Three of whom form a quorum, is empowered to superintend, manage, and conduct the general business of this Bank; to add to their number from among the Managers; to fill up vacancies in their own body, and to appoint a Treasurer or Treasurers, Agent or Agents, Auditors;

an Actuary and Clerks, or other Officers and Servants, and to withdraw any such appointments, and appoint others should it be considered necessary so to do.—The proceedings of this Committee are regularly laid before the General Meetings of the Bank.

3. ELECTIONS.—The Superintending Committee is empowered to add to the number of Managers, until they amount to One Hundred and Twenty, exclusively of the President, Vice-Presidents, and Trustees. And any vacancy of President, Vice-Presidents, and Trustees, are to be filled up at a General Meeting.

4. GENERAL MEETINGS.—A General Meeting of the President, Vice-Presidents, Trustees, and Managers of this Bank shall be held once a year, in the month of February. The Superintending Committee shall lay before every such Meeting a Report of the Transactions of the Bank, and State of the Accounts. The Superintending Committee for the succeeding year shall be elected at such General Meeting; and failing such Election, the former Committee shall be considered as re-appointed.

5. SPECIAL MEETINGS.—The Superintending Committee are authorized to call Special General Meetings when they think proper; and also, on the requisition of any Ten Managers, delivered in writing to the Actuary, or to the Manager in attendance at the Bank; and of such Meeting seven days' notice shall be given.

6. LIABILITY OF TRUSTEES, MANAGERS, OFFICERS, &c.—No Trustee or Manager shall be personally liable except for his own acts and deeds, nor for anything done by him in virtue of his office, except where he shall be guilty of wilful neglect or default; but the Treasurer or Treasurers, the Actuary, and every Officer intrusted with the receipt or custody of any sum of money deposited for the purposes of this Institution, and every Officer, or other person, receiving Salary, or Allowance, for their services from the funds thereof, shall give good and sufficient security, by Bond, or Bonds, to the Clerk of the Peace for the County of Middlesex, for the just and faithful execution of such office or trust.

7. INVESTMENT AND LIMITATION OF DEPOSITS.—Deposits of not less than *One Shilling*, and not exceeding *Thirty Pounds* in the whole, exclusive of Compound Interest, from any one Depositor, or Trustee of a Depositor, during each and every year ending on the 20th of November, will be received and invested, pursuant to 9 GEO. IV. Chap. 92, Section 11, until the same shall amount to *One Hundred and Fifty Pounds*, in the whole; and when the principal and interest together shall amount to *Two Hundred Pounds*, then no Interest will be payable on such Deposit, so long as it shall continue to amount to that sum. But Depositors whose accounts amounted to, or exceeded, *Two hundred Pounds*, at the passing the said Act on the 28th July, 1828, will continue to be entitled to Interest and Compound Interest thereon.

8. INTEREST TO BE ALLOWED TO DEPOSITORS.—In conformity with the 24th clause of the 9 GEO. 4. Cap. 92, an Interest at the rate of two-pence farthing per cent. per day being *3l. 8s. 5½d.* per cent. per annum, (*the full amount authorized by the said Act*) will be allowed to Depositors, and placed to their accounts as a Cash Deposit, in the month of *November* in each year. Depositors demanding payment of the whole amount of their Deposits in this Bank, will be allowed the Interest due on such Deposits up to the day on which notice of withdrawing shall be given, but no interest will be allowed in any case on the fractional parts of a pound sterling.

9. DESCRIPTION AND DECLARATION.—Every person desirous of making any Deposit in this Bank, shall, at the time of making their first Deposit, and at such other times as they shall be required so to do, declare their

residence, occupation, profession, or calling, and sign (either by themselves, or in case of infants under the age of seven years, by some person or persons to be approved of by the Trustees or Managers, or their officer) a declaration, that they are not directly or indirectly entitled to any Deposit in, or benefit from the funds of any other Savings Bank in England or Ireland, nor to any sum or sums standing in the name or names of any other person or persons in the Books of this Bank. And in case any such declaration shall not be true, every such person (or the person on whose behalf such declaration may have been signed) shall forfeit and lose all right and title to such Deposits, and the Trustees and Managers shall cause the sum or sums so forfeited to be paid to the Commissioners for the Reduction of the National debt, but no Depositor shall be subject or liable to any such forfeiture, on account of being a Trustee on behalf of others, or of being interested in the funds of any Friendly Society, legally established.

10. TRUSTEES ON BEHALF OF OTHERS.—Persons may act as Trustees for Depositors, whether such persons are themselves Depositors in any Savings Bank or not, provided that such Trustee or Trustees shall make such declaration on behalf of such Depositor or Depositors, and be subject to the like conditions in every respect as are required in the case of persons making Deposits on their own account, and the receipt and receipts of such Trustee, or Trustees, or the survivor of them, or the Executors or Administrators of any sole Trustee, or surviving Trustee, with or without (as may be required by the Managers) the receipt of the person on whose account such sum may have been deposited, shall be a good and valid discharge to the Trustees and Managers of the Institution.

11. MINORS.—Deposits are received from, or for the benefit of, Minors, and are subject to the same regulations as the Deposits of persons of twenty-one years of age and upwards.

12. FRIENDLY AND CHARITABLE SOCIETIES.—Friendly Societies, legally established previous to the 28th of July, 1828, may deposit their funds through their Treasurer, Steward, or other Officer or Officers, without any limitation as to the amount. But Friendly Societies formed and enrolled after that date, are not permitted to make Deposits exceeding the sum of 300*l*. principal and interest included; and no interest will be payable thereon, whenever the same shall amount to, or continue at the said sum of 300*l*. or upwards.


Deposits are received from the Trustees or Treasurers of Charitable Societies, not exceeding 100*l*. per annum, provided the amount shall not at any time exceed the sum of 300*l*. exclusive of Interest.

13. DEPOSITS OF PERSONS UNABLE TO ATTEND.—Forms are given at the Office, enabling persons to become Depositors who are unable to attend personally; and those who have previously made a deposit, may send additional sums, *together with their Book*, by any other person.

14. DEPOSITORS' BOOKS.—The Deposits are entered in the Books of the Bank at the time they are made, and the Depositor receives a Book with a corresponding entry therein; which Book must be brought to the Office every time that any further sum is deposited, also when notice is given for withdrawing money, and at the time the repayment is to be made, so that the transactions may be duly entered therein.

15. WITHDRAWING DEPOSITS.—Depositors may receive the whole or any part of their Deposits on any day appointed by the Managers, not exceeding *fourteen* days after notice has been given for that purpose, but such Deposits can only be repaid to the Depositor personally, or to the bearer of an Order, under the hand of the Depositor, signed in the presence of either the Mi-

nister, or a Churchwarden of the Parish in which the Depositor resides, of a Justice of the Peace, or of a Manager of this Bank.

 *The Depositor's Book must always be produced when notice of withdrawing is given.*

**16. MONEY WITHDRAWN MAY BE RE-DEPOSITED.**—Depositors may withdraw any sum or sums of money and re-deposit the same at any time or times within any one year, reckoning from the 20th day of November, provided such sum or sums of money re-deposited, and any previous deposit or deposits which may have been made by such Depositor in the course of the year, taken together, shall not exceed, at any time in such year, the sum of 30*l.*, additional principal money bearing interest.

**17. RETURN OR REFUSAL OF DEPOSITS.**—This Bank is at liberty to return the amount of the Deposits to all or any of the Depositors, and may refuse to receive Deposits in any case, where it shall be deemed expedient so to do.

**18. DEPOSITS OF A DECEASED DEPOSITOR EXCEEDING 50*l.***—In case of the death of any Depositor in this Bank, whose Deposits, and the Interest thereon, shall exceed in the whole the sum of *Fifty Pounds*, the same shall only be paid to the Executor or Executors, Administrator or Administrators, on the production of the Probate of the Will, or Letters of Administration.

**19. DEPOSITS OF A DECEASED DEPOSITOR not exceeding *Fifty Pounds*.**—In case a Depositor in this Bank shall die, whose Deposits, including Interest thereon, shall not exceed the sum of *Fifty Pounds*, and that the Trustees or Managers shall be satisfied that no Will was made and left, and that no Letters of Administration will be taken out, they shall be at liberty to pay the same to the relatives or friends of the deceased, or any or either of them, or according to the statute of distribution, or require the production of Letters of Administration, at their discretion. And the Bank shall be indemnified by any such payments from all and every claim in respect thereof, by any person whatsoever.

**20. CERTIFICATE.**—In all cases wherein Certificates shall be required of the Amount of Deposits in this Bank belonging to Depositors therein, for the purpose of obtaining, free of stamp duties, a Probate of Will, or Letters of Administration, such Certificate shall be signed by a Manager, and countersigned by the Actuary for the time being, as a true extract from the Ledger of the Institution.

**21. ARBITRATION OF DIFFERENCES.**—In case any dispute shall arise between the Trustees or Managers of this Bank, or any person or persons acting under them, and any individual Depositor therein, or any Trustee of a Depositor, or any person claiming to be such Executor, Administrator, or Next of Kin, then, and in every such case, the matter so in dispute shall be referred to the Barrister at Law, appointed by the Commissioners for the Reduction of the National Debt, under the authority of the 9 Geo. 4, Cap. 92, Sec. 45; and whatever award, order, or determination shall be made by the said Barrister, shall be binding and conclusive upon all parties, and shall be final, to all intents and purposes, without any appeal.

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## XXXIII. BEES.

A good old French bishop, in paying his annual visit to his clergy, was very much afflicted by the representations they made of their extreme poverty, which, indeed, the appearance of their houses and families corroborated. Whilst he was deploring the state of things which had reduced them to this sad condition, he arrived at the house of a curate, who, living amongst a poorer set of parishioners than any he had yet visited, would, he feared, be in a still more woful plight than the others. Contrary, however, to his expectations, he found appearances very much improved. Everything about the house wore the aspect of comfort and plenty. The good Bishop was amazed. "How is this, my friend?" said he; "you are the first man that I have met with a cheerful face and a plentiful board. Have you any income independent of your cure?" "Yes, sir," said the clergyman, "I have; my family would starve on the pittance I receive from the poor people that I instruct. Come with me into the garden, and I will show you the *stock* that yields me an excellent interest." On going to the garden, he showed the Bishop a large range of bee-hives. "There is the bank from which I draw an annual dividend. It never stops payment." Ever after that memorable visit, when any of his clergy complained to the bishop of poverty, he would say to them, "Keep bees, keep bees."—(*North American Review*.)

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## XXXIV. MAXIMS.

WE observe a contrariety in some maxims to one another. Pope, the poet has a line, "A little learning is a dangerous thing," which we often hear repeated, as a maxim, by those who have but a very little themselves. We have also this other maxim, "Half a loaf is better than no bread;" and this is certainly true of bread. Is it not likely to be true of knowledge also? Try it in a few practical cases. A little knowledge of navigation is better to the sailor than no knowledge. A little knowledge of soils, and seasons, and cropping, and stock, is better for the farmer than no knowledge. A little knowledge of tailoring is better to the tailor than no knowledge. A little knowledge of anatomy is better to the surgeon than no knowledge. The truth is, that much knowledge is the best thing; a little knowledge the next best; and no knowledge the worst of all. The line of the poet is good in the sound, bad in the sense.

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Love wisdom and you will obtain it. Thus Selden says; "The difference of men is very great; you would scarce think them to be of the same species; and yet it consists more in the affection than the intellect. For, as in the strength of the body

two men shall be of an equal strength, yet one shall appear stronger than the other, because he exercises and puts out his strength, the other will not stir nor strain himself:—so 'tis in the strength of the brain; the one endeavours, and strains, and labours, and studies; the other sits still and is idle, and takes no pains, and therefore he appears so much the inferior." What an encouragement to him that takes pains!

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False despatch is one of the most dangerous things to business that can be. It is like that which the physicians call pre-digestion, or hasty digestion, which is sure to fill the body full of crudities, and secret seeds of diseases. I knew a wise man had it for a byeword; "Stay a little, that we may make an end the sooner." On the other side true despatch is a rich thing: for time is the measure of business, as money is of wares; and business is bought at a dear hand, when there is small despatch.—BACON.

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There is an excellent book by Defoe, the author of "Robinson Crusoe," called "The complete English Tradesman;" and in it an admirable chapter, entitled "Of the Tradesman's marrying too soon." In this he says, "It was a prudent provision which our ancestors made in the indentures of tradesmen's apprentices, that they should not contract matrimony during their apprenticeship. Doubtless our forefathers were better acquainted with the advantages of frugality than we are. Hence we find them very careful to prescribe to their youth such rules and methods of frugality and good husbandry, as they thought would best conduce to their prosperity. Among these rules, this was one of the chief: viz. 'That they should not wed, before they had sped.'"

When a young tradesman, says the same author, in Holland or Germany, goes a courting, the first question the young woman asks of him is, "Are you able to pay the charges?" That is to say, in English, are you able to keep a wife when you have got her? What a world of misery it would prevent if the young women in all countries would stick to the wisdom of that question!

"Marriage is not made of mushrooms, but of good round cakes," is another of the pithy sayings by which our ancestors conveyed the same great rule of prudence.



## PART IV.

THE LEGISLATION, STATISTICS, PUBLIC IMPROVEMENTS, AND  
CHRONICLE OF 1828.

## XXXV. ABSTRACT OF IMPORTANT PUBLIC ACTS.

PASSED IN THE LAST SESSION OF PARLIAMENT.

[9 Geo. IV.—1828.]

## SESSIONS OF THE PEACE IN WESTMINSTER.

[9 Geo. IV. c. 9.—Passed 3d April, 1828.]

This is an Act to enable the Justices of the Peace for Westminster to hold their Sessions of the Peace during Term and the Sitting of the Court of King's Bench, which they were previously not authorized to do.

## STEAM VESSELS (Ireland).

[9 Geo. IV. c. 11.—Passed 3d April, 1828.]

By this Act Vessels propelled by Steam are exempted from the Penalties to which Vessels are liable, under various Acts, for having fire on board in the ports, harbours, rivers, canals, and lakes of Ireland.

## STAMPS ON INSURANCES FROM FIRE.

[9 Geo. IV. c. 13.—Passed 9th May, 1828.]

By this Act, for further regulating the Payment of the Duties, under the management of the Commissioners of Stamps, on Insurances from loss or damage by fire, the mode in which Insurances are to be made upon detached buildings, so separated from each other as to occasion a plurality of risks, is determined.

## PROMISES AND ENGAGEMENTS.

[9 Geo. IV. c. 14.—Passed 9th May, 1828.]

*An Act for rendering a written Memorandum necessary to the validity of certain promises and engagements.*

1. The preamble recites, that whereas by the 21st Jac. I. c. 16. it was, among other things, enacted, that all actions of account and upon the case [other than such accounts as concern the trade of merchandise between merchant and merchant, their factors or servants], all actions of debt grounded upon any lending or contract without specialty, and all actions of debt for arrearages of rent, should be commenced within three years after the end of the then present session of parliament, or within six years after the cause of such actions or suit, and not after : and whereas by the 10th Car. I. sess. 2. c. 6. of the parliament of Ireland, a similar enactment is made : and whereas various questions have arisen, in actions founded on simple contract, as to the proof and effect of acknowledgments and promises offered in evidence for the purpose of taking cases out of the operation of the said enactments ; and it is expedient to prevent such questions, and to make provision for giving effect to the said enactments, and to the intention thereof : it is therefore enacted, That in actions of debt, or upon the case, grounded upon any simple contract, no acknowledgment or promise by words only shall be deemed sufficient evidence of a new or continuing contract, whereby to take any case out of the operation of the said enactments, or either of them, or to deprive any party of the benefit thereof, unless such acknowledgment or promise shall be made or contained by or in some writing to be signed by the party chargeable thereby ; and that where there shall be two or more joint contractors, or executors, or administrators of any contractor, no such joint contractor, executor, or ad-

ministrator, shall lose the benefit of the said enactments, or either of them, so as to be chargeable in respect or by reason only of any written acknowledgment or promise made and signed by any other or others of them: provided that nothing herein contained shall alter or take away or lessen the effect of any payment of any principal or interest made by any person whatsoever: provided also, that in actions to be commenced against two or more such joint contractors, or executors, or administrators, if it shall appear at the trial, or otherwise, that the plaintiff, though barred by either of the said recited acts or this act, as to one or more of such joint contractors, or executors, or administrators, shall nevertheless be entitled to recover against any other or others of the defendants, by virtue of a new acknowledgment or promise, or otherwise, judgment may be given and costs allowed for the plaintiff as to such defendant or defendants against whom he shall recover, and for the other defendant or defendants against the plaintiff.

2. And if any defendant in any action on any simple contract shall plead any matter in abatement, to the effect that any other person ought to be jointly sued, and issue be joined on such plea, and it shall appear at the trial that the action could not, by reason of the said recited acts or this act, or of either of them, be maintained against the other person named in such plea, the issue joined on such plea shall be found against the party pleading the same.

3. And no indorsement or memorandum of any payment written or made after the time appointed for this act to take effect, upon any promissory note, bill of exchange, or other writing, on the behalf of the party to whom such payment shall be made, shall be deemed sufficient proof of such payment, so as to take the case out of the operation of either of the said statutes.

4. And the said recited acts and this act shall be deemed and taken to apply to the case of any debt on simple contract alleged by way of set-off on the part of any defendant, either by plea, notice, or otherwise.

5. No action shall be maintained whereby to charge any person upon any promise made after full age to pay any debt contracted during infancy, or upon any ratification after full age of any promise or simple contract made during infancy, unless such promise or ratification shall be made by some writing signed by the party to be charged therewith.

6. And no action shall be brought whereby to charge any person by reason of any representation or assurance made or given concerning or relating to the character, conduct, credit, ability, trade, or dealings of any other person, to the intent or purpose that such other person may obtain credit, money, or goods upon, unless such representation or assurance be made in writing, signed by the party to be charged therewith.

7. And whereas by the 29th Car. II. c. 3. entitled *An act for the Prevention of frauds and perjuries*, and the 7th Will. III. c. 12. of the parliament of Ireland, it is, among other things, enacted, that no contract for the sale of any goods, wares, and merchandises, for the price of ten pounds sterling or upwards, shall be allowed to be good, except the buyer shall accept part of the goods so sold, and actually receive the same, or give something in earnest to bind the bargain, or in part of payment, or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged by such contract, or their agents thereunto lawfully authorized; and whereas it has been held, that the said recited enactments do not extend to certain executory contracts for the sale of goods, which nevertheless are within the mischief thereby intended to be remedied; and it is expedient to extend the said enactments to such executory contracts; it is enacted, That the said enactments shall extend to all contracts for the sale of goods of the value of ten pounds sterling and upwards, notwithstanding the goods may be intended to be delivered at some future time, or may not at the time of such contract be actually made, procured, or provided, or fit or ready for delivery, or some act may be requisite for the making or completing thereof, or rendering the same fit for delivery.

8. No memorandum or other writing made necessary by this act shall be deemed to be an agreement within the meaning of any statute relating to the duties of stamps.

9. Nothing in this act shall extend to Scotland.

10. This act is to commence on the 1st of January, 1829.

### VARIANCES BETWEEN RECORDS AND EVIDENCE.

[9 Geo. IV. c. 15.—Passed 9th May, 1828.]

*An Act to prevent a failure of Justice by reason of variances between Records and Writings produced in evidence in support thereof.*

Whereas great expense is often incurred, and delay or failure of justice takes place at trials, by reason of variances between writings produced in evidence, and the setting forth thereof upon the record, in matters not material to the merits of the case; for remedy thereof it is enacted, That it shall be lawful for every court of record holding plea in civil actions, any judge sitting at Nisi Prius, and any court of oyer and terminer and general gaol delivery, in England, Wales, the town of Berwick-upon-Tweed, and Ireland, if such court or judge shall see fit, to cause the record on which any trial may be pending before any such judge or court in any civil action, or in any indictment or information for any misdemeanour, when any variance shall appear between any matter in writing or in print produced in evidence, and the recital or setting forth thereof upon the record whereon the trial is pending, to be forthwith amended in such particular by some officer of the court, on payment of such costs (if any) to the other party as such judge or court shall think reasonable; and thereupon the trial shall proceed as if no such variance had appeared. And in case such trial shall be had at Nisi Prius, the order for the amendment shall be indorsed on the postea, and returned together with the record; and thereupon the papers, rolls, and other records of the court, shall be amended accordingly.

### NATIONAL DEBT ANNUITIES.

[9 Geo. IV. c. 16.—Passed 9th May, 1828.]

This is an Act to repeal so much of several Acts as empowers the Commissioners for the Reduction of the National Debt to grant Life Annuities. Not to affect annuities already granted.

### CORPORATION AND TEST ACTS.

[9 Geo. IV. c. 17.—Passed 9th May, 1828.]

*An Act for repealing so much of several Acts as imposes the necessity of receiving the Sacrament of the Lord's Supper as a qualification for certain offices and employments.*

1. After reciting the 13th Car. II. s. 2. c. 1., the 25th Car. II. c. 2., and the 16th Geo. II. c. 30., this act enacts, That so much and such parts of the said several acts as require the person or persons in the said acts respectively described to take or receive the sacrament of the Lord's Supper according to the rites or usage of the Church of England, for the several purposes therein expressed, or to deliver a certificate, or make proof of the truth of such his or their receiving the said sacrament in manner aforesaid, or as impose upon any such person or persons any penalty, forfeiture, incapacity, or disability whatsoever, for or by reason of any neglect or omission to take or receive the said sacrament, within the respective periods and in the manner in the said acts respectively provided in that behalf, shall be repealed.

2. And whereas the Protestant Episcopal Church of England and Ireland, and the Protestant Presbyterian Church of Scotland, and the doctrine, discipline, and government thereof respectively, are by the laws of this realm, severally established, permanently and inviolably; and whereas it is just and fitting, that on the repeal of such parts of the said acts as im-

pose the necessity of taking the sacrament of the Lord's Supper according to the rites or usage of the Church of England, as a qualification for office, a declaration to the following effect should be substituted in lieu thereof; it is therefore enacted, That every person who shall hereafter be placed, elected, or chosen in or to the office of mayor, alderman, recorder, bailiff, town clerk, or common councilman, or in or to any office of magistracy, or place, trust, or employment relating to the government of any city, corporation, borough, or cinque port within England and Wales, or the town of Berwick-upon-Tweed, shall, within one calendar month next before or upon his admission into any of the aforesaid offices or trusts, make and subscribe the declaration following:—

I, A. B., do solemnly and sincerely, in the presence of God, profess, testify, and declare, upon the true faith of a Christian, that I will never exercise any power, authority, or influence, which I may possess by virtue of the office of \_\_\_\_\_ to injure or weaken the Protestant Church as it is by law established in England, or to disturb the said church, or the bishops and clergy of the said church, in the possession of any rights or privileges to which such church, or the said bishops and clergy, are or may be by law entitled.

3. And the said declaration shall be made and subscribed as aforesaid, in the presence of such person or persons respectively, who, by the charters or usages of the said respective cities, corporations, boroughs, and cinque ports, ought to administer the oath for due execution of the said offices; and in default of such, in the presence of two justices of the peace of the said cities, corporations, boroughs, and cinque ports, if such there be, or otherwise in the presence of two justices of the peace of the respective counties, ridings, divisions, or franchises, wherein the said cities, corporations, boroughs, and cinque ports are; which said declaration shall either be entered in a book, roll, or other record, to be kept for that purpose, or shall be filed amongst the records of the city, corporation, borough, or cinque port.

4. If any person placed, elected, or chosen into any of the aforesaid offices or places, shall omit or neglect to make and subscribe the said declaration, such placing, election, or choice shall be void.

5. Every person who shall hereafter be admitted into any office or employment, or who shall accept from his Majesty any patent, grant, or commission, and who by his admittance, or by his acceptance of such patent, &c. or by the receipt of any pay, salary, fee, or wages by reason thereof, would by the laws in force immediately before the passing of this act have been required to take the sacrament of the Lord's Supper according to the rites or usage of the Church of England, shall, within six calendar months, make and subscribe the aforesaid declaration, or in default thereof his appointment to such office, employment, or place of trust, and such patent, grant, or commission, shall be wholly void.

6. And the aforesaid declaration shall be made and subscribed in his Majesty's High Court of Chancery, or in the Court of King's Bench, or at the Quarter-sessions of the county or place where the person so required to make the same shall reside.

7. No naval officer below the rank of rear-admiral, and no military officer below the rank of major-general in the army or colonel in the militia, shall be required to make or subscribe the said declaration; and no commissioner of customs, excise, stamps, or taxes, or any person holding any of the offices concerned in the collection, management, or receipt of the revenues which are subject to the said commissioners, or any of the officers concerned in the collection, management, or receipt of the revenues subject to the authority of the postmaster-general, shall be required to make or subscribe the said declaration; and nothing herein contained shall extend to require any naval or military officer, or other person as aforesaid, upon whom any office, place, commission, appointment, or promotion shall be conferred during his absence from England, or within three months previous to his departure from thence, to make and sub-

scribe the said declaration until after his return to England, or within six months thereafter.

8. All persons now in the actual possession of any office, command, place, trust, service, or employment, or in the receipt of any pay, salary, fee, or wages, in respect of or as a qualification for which, by virtue of or under any of the before-mentioned acts, or any other act, they respectively ought to have heretofore taken or ought hereafter to receive the said sacrament, are hereby confirmed in the possession and enjoyment of their said several offices, &c. notwithstanding their omission or neglect to take or receive the sacrament of the Lord's Supper, and are hereby indemnified, freed, and discharged from all incapacities, disabilities, forfeitures, and penalties whatsoever, already incurred; or which might hereafter be incurred, in consequence of any such omission or neglect.

9. No act done in the execution of any of the corporate or other offices, places, trusts, or commissions aforesaid, by any such person omitting or neglecting as aforesaid, shall by reason thereof be void or voidable as to the rights of any other person not privy to such omission or neglect, or render such last-mentioned person liable to any action or indictment.

### CARDS AND DICE.

[9 Geo. IV. c. 18.—Passed 9th May, 1828.]

*An Act to repeal the Stamp Duties on Cards and Dice made in the United Kingdom, and to grant other Duties in lieu thereof; and to amend and consolidate the Acts relating to such Cards and Dice, and the exportation thereof.*

1. By this act the duties on cards and dice under former acts are repealed.

2. There shall be granted, raised, levied, collected, and paid, in the United Kingdom of Great Britain and Ireland, unto his Majesty, the several duties following; that is to say—

For and upon every licence to be taken out annually by every maker of Playing Cards or Dice in the United Kingdom, the sum of *five shillings*.

And for and in respect of every *pack* of Playing Cards, which shall be made fit for sale or use in the United Kingdom, the sum of *one shilling*.

And for and in respect of every *pair* of Dice which shall be made fit for sale or use in the United Kingdom, the sum of *twenty shillings*.

5. Penalty for making Cards or Dice without licence, 100*l.* and forfeiture of materials.

7. No licence shall be granted to any person making playing cards or dice, nor shall any person set up the trade of making playing cards or dice, nor make, or cause to be made, any playing cards or dice, in any part of Great Britain, except in the cities of London and Westminster, or in the borough of Southwark, nor in any part of Ireland, other than in the cities of Dublin and Cork, or in the respective liberties of the said cities of Dublin and Cork; and after three years in no part of Ireland other than in the city of Dublin, or the liberties thereof, under a penalty of 100*l.*

24. No playing cards shall be sold as waste cards, unless a corner of every such card shall be cut off at least half an inch in depth, nor unless the same shall be sold or exposed to sale in parcels, without being inclosed in any wrapper, or paper, or other cover.

25. It shall be lawful for any person, not being a licensed maker of playing cards, to sell any pack of playing cards, notwithstanding the same may have been previously sold, and opened, used, or played with, if every such pack shall be sold without the wrapper or jew of any licensed maker, and shall contain not more than fifty-two cards, including an ace of spades duly stamped for use within the United Kingdom, and shall be inclosed in a paper or wrapper, with the words "Second-Hand Cards" printed or written in distinct and legible characters on the outside thereof.

## PASSAGE VESSELS TO NORTH AMERICA.

[9 Geo. IV. c. 21.—Passed 23d May, 1828.]

By this Act various regulations are enacted for the carriage of Passengers in Merchant Vessels from the United Kingdom to the continent and islands of North America, so as to ensure their safety and comfort.

## CONTROVERTED ELECTIONS.

[9 Geo. IV. c. 22.—Passed 23d May, 1828.]

By this Act the Laws relating to the Trial of Controverted Elections or Returns of Members to serve in Parliament are consolidated and amended.

## COMPOSITION FOR STAMP DUTIES ON BANKERS' BILLS AND NOTES.

[9 Geo. IV. c. 23.—Passed 19th June, 1828.]

By this Act Bankers in England are enabled to issue certain unstamped Promissory Notes and Bills of Exchange, upon payment of a Composition in lieu of the Stamp Duties thereon, and taking out a Licence.

## CONSOLIDATION OF THE LAWS RELATIVE TO BILLS OF EXCHANGE (Ireland).

[9 Geo. IV. c. 24.—Passed 19th June, 1828.]

By this act the statutes relating to bills of exchange and promissory notes in Ireland are consolidated and amended, so that the law in relation thereto may be assimilated to that of England; and the fees payable to notaries public in Ireland, for noting and protesting such bills and notes, are regulated and defined.

## ALLOWANCES UPON STAMPS.

[9 Geo. IV. c. 27.—Passed 19th June, 1828.]

*An Act to repeal the Allowances made to Stationers on the purchase of Stamps for Receipts at the head office in London, and to grant an Allowance to persons purchasing such Stamps to a certain amount of the Commissioners of Stamps, or of the Distributors of Stamps, in Great Britain.*

1. By this act, from and after the 5th July, 1828, the allowances granted by the 44th Geo. III. c. 98, are repealed. And it is enacted, in lieu of the said allowances, and of all other allowances on the purchase of stamps for receipts, there shall be made to every person who, at one and the same time, shall buy of the commissioners of stamps, at their head office for stamps in London, stamps for receipts to the amount of five pounds or upwards, or who at one and the same time shall buy of any distributor or sub-distributor of stamps in any other part of Great Britain, not being within the distance of ten miles from the said head office, stamps for receipts to the amount of one pound or upwards, an allowance of the sum of seven pounds ten shillings for every one hundred pounds, and so in proportion for any greater or less sum than one hundred pounds of such stamps so purchased, not under five pounds or one pound respectively: provided always, that no allowance shall be made for any fractional part of the sum of one pound.

4. If any person or persons, upon the sale of any stamp or stamps for receipts, shall make any charge to the purchaser of such stamp or stamps for the paper whereon the same shall be impressed, or shall, under any colour or pretence whatever, demand or receive a greater price or sum than the amount of the stamp duty denoted by such stamp or stamps, every such person so offending shall for every such offence forfeit the sum of ten pounds.

5. Not to prevent any charge for books of receipt stamps, or for vellum or parchment.

6. Every person shall be relieved and indemnified against all forfeitures and penalties incurred by giving unstamped receipts at any time before the passing of this act.

**CIRCUIT COURTS AND CRIMINAL TRIALS (Scotland).**

[9 Geo. IV. c. 29.—Passed 19th June, 1828.]

This is an Act to authorize additional Circuit Courts of Justiciary to be held, and to facilitate Criminal Trials, in Scotland.

**OFFENCES AGAINST THE PERSON.**

[9 Geo. IV. c. 31.—Passed 27th June, 1828.]

*An Act for consolidating and amending the Statutes in England relative to Offences against the Person.*

By this act various statutes now in force in that part of the United Kingdom called England, relative to offences against the person, are repealed, in order that the provisions contained in those statutes may be amended and consolidated.

1. This act shall commence and take effect (except as is hereinbefore excepted) on the 1st of July in the present year.

2. Every offence, which before this act would have amounted to petit treason, shall be deemed to be murder only.

3. Every person convicted of murder, or of being an accessory before the fact to murder, shall suffer death as a felon; and every accessory after the fact to murder shall be liable to be transported for life, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding four years.

4. Every person convicted of murder shall be executed on the day next but one after that on which the sentence shall be passed, unless the same shall happen to be Sunday, and in that case on the Monday following; and the body shall, after execution, either be dissected or hung in chains, as to the court shall seem meet. And sentence shall be pronounced immediately after the conviction of every murderer, unless the court shall see reasonable cause for postponing the same; and such sentence shall express not only the usual judgment of death, but also the time appointed for the execution thereof, and that the body of the offender shall be dissected or hung in chains, whichever of the two the court shall order: provided, that after such sentence shall have been pronounced, it shall be lawful for the court or judge to stay the execution thereof, if it shall think fit.

5. Regulates how that part of the sentence relative to dissection shall be executed.

6. Every person convicted of murder shall, after judgment, be confined in some safe place within the prison, apart from all other prisoners, and shall be fed with bread and water only, and with no other food or liquor, except in case of receiving the sacrament, or in case of any sickness or wound; and no person but the gaoler and his servants, and the chaplain and surgeon, shall have access to any such convict, without the permission in writing of the court or judge before whom such convict shall have been tried, or of the sheriff or his deputy: provided, that in case the court or judge shall think fit to respite the execution, he or it may, by a licence in writing, relax, during the period of the respite, all or any of the above restraints or regulations.

7. If any of his majesty's subjects shall be charged in England with any murder or manslaughter, or with being accessory before the fact, or after the fact, the same being respectively committed on land out of the United Kingdom (whether within the king's dominions or without), it shall be lawful for any justice of the peace of the county or place where the person so charged shall be, to take cognizance of the offence; and if any person so charged shall be committed for trial, or admitted to bail, a commission of oyer and terminer under the great seal shall be directed to such persons, and into such county or place as shall be appointed, for the speedy trial of any such offender; and such persons shall have full power to inquire of, hear, and determine all such offences within the county or place limited

in their commission, by such good and lawful men of the said county or place as shall be returned before them for that purpose: provided, that if any peers of the realm, or persons entitled to the privilege of peerage, shall be indicted of any such offences, they shall be tried by their peers in the manner heretofore used: provided also, that nothing herein contained shall prevent any person from being tried in any place out of this kingdom for any murder or manslaughter committed out of this kingdom, in the same manner as such person might have been tried before the passing of this act.

8. Where any person, being feloniously stricken, poisoned, or otherwise hurt upon the sea, or at any place out of England, shall die of such stroke; poisoning, or hurt in England, or being feloniously stricken, poisoned, or otherwise hurt at any place in England, shall die of such stroke, poisoning, or hurt upon the sea, or at any place out of England, every such offence (whether the same shall amount to murder or manslaughter, or of being accessory before the fact to murder, or after the fact to murder or manslaughter) may be dealt with, inquired of, tried, determined, and punished in the county or place in England in which such death, stroke, poisoning, or hurt shall happen.

9. Every person convicted of manslaughter shall be liable, at the discretion of the court, to be transported for life, or for any term not less than seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding four years, or to pay such fine as the court shall award.

10. No punishment or forfeiture shall be incurred by any person who shall kill another by misfortune, or in his own defence, or in any other manner without felony.

11. If any person unlawfully and maliciously shall administer or attempt to administer to any person; or shall cause to be taken by any person, any poison or other destructive thing; or shall unlawfully and maliciously attempt to drown, suffocate, or strangle any person; or shall unlawfully and maliciously shoot at any person; or shall, by drawing a trigger, or in any other manner, attempt to discharge any kind of loaded arms at any person; or shall unlawfully and maliciously stab, cut, or wound any person, with intent, in any of the cases aforesaid, to murder such person, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and, being convicted thereof, shall suffer death as a felon.

12. If any person unlawfully and maliciously shall shoot at, or shall, by drawing a trigger, or, in any other manner, attempt to discharge any kind of loaded arms at any person; or shall unlawfully and maliciously stab, cut, or wound, with intent to maim, disfigure, or disable such person, or to do some other grievous bodily harm to such person, or with intent to resist or prevent the lawful apprehension or detainer of the party so offending, or of any of his accomplices, for any offence for which he or they may respectively be liable by law to be apprehended or detained, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and, being convicted thereof, shall suffer death as a felon: provided, that in case it shall appear on the trial, that such acts aforesaid were committed under such circumstances that, if death had ensued therefrom, the same would not in law have amounted to the crime of murder, in every such case the person shall be acquitted of felony.

13. If any person, with intent to procure the miscarriage of any woman then being quick with child, unlawfully and maliciously shall administer to her, or cause to be taken by her, any poison or other noxious thing, or shall use any instrument or other means whatever with the like intent, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and shall suffer death as a felon; and if any person, with intent to procure the miscarriage of any woman not being, or not being proved to be, then quick with child, unlawfully



and maliciously shall administer to her, or cause to be taken by her, any medicine or other thing, or shall use any instrument or other means whatever with the like intent, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and being convicted thereof, shall be liable to be transported for any term not exceeding fourteen years nor less than seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding three years; and if a male, to be once, twice, or thrice publicly or privately whipped (if the court shall so think fit) in addition to such imprisonment.

14. If any woman shall be delivered of a child, and shall, by secret burying or otherwise disposing of the dead body of the said child, endeavour to conceal the birth thereof, every such offender shall be guilty of a misdemeanour, and shall be liable to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding two years; and it shall not be necessary to prove whether the child died before, at, or after its birth: provided, that if any woman tried for the murder of her child shall be acquitted thereof, it shall be lawful for the jury to find, in case it shall so appear in evidence, that she was delivered of a child, and that she did, by secret burying or otherwise disposing of the dead body of such child, endeavour to conceal the birth thereof, and thereupon the court may pass such sentence as if she had been convicted upon an indictment for the concealment of the birth.

15. Every person convicted of an abominable crime shall suffer death as a felon.

16. Every person convicted of the crime of rape shall suffer death as a felon.

17. If any person shall unlawfully and carnally know and abuse any girl under the age of ten years, every such offender shall be guilty of felony, and shall suffer death. And if any person shall unlawfully and carnally know and abuse any girl being above the age of ten and under the age of twelve years, every such offender shall be guilty of a misdemeanour, and shall be liable to be imprisoned, with or without hard labour, in the common gaol or house of correction, for such term as the court shall award.

18. Alters the previous law with respect to the proof of carnal knowledge.

19. Where any woman shall have any interest, whether legal or equitable, present or future, absolute, conditional, or contingent, in any real or personal estate; or shall be an heiress presumptive or next of kin to any one having such interest, if any person shall, from motives of lucre, take away or detain such woman against her will, with intent to marry or defile her, or to cause her to be married or defiled by any other person, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and shall be liable to be transported for life, or for any term not less than seven years; or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding four years.

20. If any person shall unlawfully take, or cause to be taken, any unmarried girl, being under the age of sixteen years, out of the possession and against the will of her father or mother, or of any other person having the lawful care or charge of her, every such offender shall be guilty of a misdemeanour, and shall be liable to suffer such punishment, by fine or imprisonment, or by both, as the court shall award.

21. And if any person shall maliciously, either by force or fraud, lead or take away, or decoy or entice away, or detain, any child under the age of ten years, with intent to deprive the parents, or any other person having the lawful care or charge of such child, of the possession of such child, or with intent to steal any article upon or about the person of such child; or if any person shall, with any such intent, receive or harbour any such child, knowing the same to have been led, taken, decoyed, enticed away, or detained; every such offender, and every person counsel-

ling, aiding, or abetting such offender, shall be guilty of felony, and shall be liable to be transported for the term of seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding two years, and, if a male, to be once, twice, or thrice publicly or privately whipped (if the court shall so think fit) in addition to such imprisonment: provided, that no person who shall have claimed to be the father of an illegitimate child, or to have any right to the possession of such child, shall hereby be liable to be prosecuted on account of his getting possession of such child, or taking such child out of the possession of the mother, or any other person having the lawful charge thereof.

22. If any person being married shall marry any other person during the life of the former husband or wife, whether the second marriage shall have taken place in England or elsewhere, every such offender, and every person counselling, aiding, or abetting such offender, shall be guilty of felony, and shall be liable to be transported for the term of seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding two years; and any such offence may be dealt with, inquired of, tried, determined, and punished in the county where the offender shall be apprehended or be in custody: provided, that nothing herein contained shall extend to any second marriage contracted out of England by any other than a subject of his majesty, or to any person marrying a second time, whose husband or wife shall have been continually absent from such person for the space of seven years then last past, and shall not have been known by such person to be living within that time, or shall extend to any person whose former marriage shall have been declared void by the sentence of any court of competent jurisdiction.

23. If any person shall arrest any clergyman upon any civil process while he shall be performing divine service, or shall (with the knowledge of such person) be going to perform the same, or returning from the performance thereof, every such offender shall be guilty of a misdemeanor, and shall suffer such punishment, by fine or imprisonment, or by both, as the court shall award.

24. If any person shall assault and strike or wound any magistrate, officer, or other person whatsoever lawfully authorized, on account of the exercise of his duty in or concerning the preservation of any vessel in distress, or of any vessel, goods, or effects wrecked, stranded, or cast on shore, or lying under water, every such offender shall be liable to be transported for the term of seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for such term as the court shall award.

25. And where any person shall be convicted of any assault with intent to commit felony; of any assault upon any peace officer or revenue officer in the due execution of his duty, or upon any person acting in aid of such officer; of any assault upon any person with intent to resist or prevent the lawful apprehension or detainure of the party so assaulting, or of any other person, for any offence for which he or they may be liable by law to be apprehended or detained; or of any assault committed in pursuance of any conspiracy to raise the rate of wages; the court may sentence the offender to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding two years, and may also (if it shall so think fit) fine the offender, and require him to find sureties for keeping the peace.

26. And if any person shall unlawfully and with force hinder any seaman, keelman, or caster from working at or exercising his lawful trade, business, or occupation; or shall beat, wound, or use any other violence to him, with intent to deter or hinder him from working at or exercising the same; or if any person shall beat, wound, or use any other violence to any person, with intent to deter or hinder him from selling or buying any wheat or other grain, flour, meal, or malt, in any market or

other place; or shall beat, wound, or use any other violence to any person having the care or charge of any wheat or other grain, flour, meal, or malt, whilst on its way to or from any city, market town, or other place, with intent to stop the conveyance of the same, every such offender may be convicted thereof before two justices of the peace, and imprisoned and kept to hard labour in the common gaol or house of correction for any term not exceeding three calendar months.

27. Where any person shall unlawfully assault any other person, it shall be lawful for two justices of the peace to hear and determine such offence; and the offender, upon conviction, shall forfeit and pay such fine as to them shall seem meet, not exceeding (together with costs, if ordered) the sum of five pounds, which fine shall be paid to some one of the overseers of the poor, or to some other officer of the parish, township, or place in which the offence shall have been committed, to be paid over to the use of the general rate of the county, riding, or division in which such parish, township, or place shall be situate; and the evidence of any inhabitant of the county, riding, or division, shall be admitted in proof of the offence; and if such fine, together with the costs, shall not be paid, either immediately after the conviction, or within such period as the said justices shall appoint, it shall be lawful for them to commit the offender to the common gaol or house of correction, there to be imprisoned for any term not exceeding two calendar months, unless such fine and costs be sooner paid; but if the justices shall deem the offence not to be proved, or shall find the assault or battery to have been justified, or so trifling as not to merit any punishment, and shall accordingly dismiss the complaint, they shall forthwith make out a certificate, stating the fact of such dismissal, and shall deliver such certificate to the party against whom the complaint was preferred.

28. If any person against whom any such complaint shall have been preferred for any common assault or battery, shall have obtained such certificate, or having been convicted shall have paid the whole amount adjudged, or shall have suffered the imprisonment for nonpayment, in every such case he shall be released from all further or other proceedings, civil or criminal, for the same cause.

29. In case the justices shall find the assault or battery complained of to have been accompanied by any attempt to commit felony, or shall be of opinion that the same is, from any other circumstance, a fit subject for a prosecution by indictment, they shall abstain from any adjudication thereupon, and shall deal with the case in all respects in the same manner as they would have done before the passing of this act: provided, that nothing shall authorize any justices of the peace to hear and determine any case of assault or battery in which any question shall arise as to the title to any lands, tenements, or hereditaments, or any interest therein or accruing therefrom, or as to any bankruptcy or insolvency, or any execution under the process of any court of justice.

30. If any master of a merchant vessel shall, during his being abroad, force any man on shore, or wilfully leave him behind in any of his majesty's colonies or elsewhere, or shall refuse to bring home with him again all such of the men whom he carried out with him as are in a condition to return when he shall be ready to proceed on his homeward-bound voyage, every such master shall be guilty of a misdemeanor, and shall be imprisoned for such term as the court shall award. And all such offences may be prosecuted by indictment or by information, at the suit of his majesty's attorney-general, in the Court of King's Bench, and may be alleged in the indictment or information to have been committed at Westminster in the county of Middlesex; and the said court is authorized to issue one or more commissions, if necessary, for the examination of witnesses abroad; and the depositions taken under the same shall be received in evidence on the trial of every such indictment or information.

31. Every accessory before the fact to any felony punishable under this act, for whom no punishment has been hereinbefore provided, shall be

liable, at the discretion of the court, to be transported for any term not exceeding fourteen years nor less than seven years, or to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding three years. And every accessory after the fact to any felony punishable under this act (except murder) shall be liable to be imprisoned, with or without hard labour, in the common gaol or house of correction, for any term not exceeding two years. And every person who shall counsel, aid, or abet the commission of any misdemeanor punishable under this act, shall be liable to be proceeded against, and punished as a principal offender.

32. All indictable offences mentioned in this act, which shall be committed within the jurisdiction of the admiralty of England, shall be deemed to be offences of the same nature, and liable to the same punishments, as if they had been committed upon the land in England, and may be dealt with, inquired of, tried, and determined in the same manner as any other offences committed within the jurisdiction of the admiralty of England.

33. Where any person shall be charged on the oath of a credible witness before any justice of the peace with any offence punishable by summary conviction under this act, the justice may summon the party charged to appear before any two justices, at a time and place to be named in such summons; and if he shall not appear, then (upon proof of the due service of the summons upon such person by delivering the same to him) the justices may either proceed to hear and determine the case *ex parte*, or may issue their warrant for apprehending such person, and bringing him before them; or the justice before whom the charge shall be made may (if he shall so think fit) issue such warrant in the first instance, without any previous summons.

34. The prosecution for every offence punishable on summary conviction by virtue of this act shall be commenced within three calendar months after the commission of the offence.

36. No conviction shall be quashed for want of form, or be removed by certiorari or otherwise into any of his majesty's superior courts of record; and no warrant of commitment shall be held void by reason of any defect therein, provided it be therein alleged that the party has been convicted, and there be a good and valid conviction to sustain the same.

37. Nothing in this act shall affect or alter any act so far as it relates to the crime of high treason, or to any branch of the public revenue, or shall affect or alter any act for the prevention of smuggling, or any part of the 6 Geo. IV. intituled *An act to repeal the laws relating to the combination of workmen, and to make other provisions in lieu thereof*.

38. And nothing herein shall extend to Scotland or Ireland.

#### LAW OF EVIDENCE.

[9 Geo. IV. c. 32.—Passed 27th June, 1828.]

*An Act for amending the law of evidence in certain cases.*

1. By this act it is enacted, That every Quaker or Moravian who shall be required to give evidence in any case, criminal or civil, shall, instead of taking an oath in the usual form, be permitted to make his or her solemn affirmation or declaration in the words following—"I, A. B., do solemnly, sincerely, and truly declare and affirm." And if any person making such affirmation or declaration shall be convicted of having wilfully, falsely, and corruptly affirmed or declared any matter or thing, which if the same had been sworn in the usual form would have amounted to wilful and corrupt perjury, every such offender shall be subject to the same pains, penalties, and forfeitures to which persons convicted of wilful and corrupt perjury are or shall be subject.

2. On any prosecution by indictment or information, against any person, for forging any deed, writing, instrument, or other matter, or for uttering or disposing of any deed, writing instrument, or other matter,

knowing the same to be forged; or for being accessory, before or after the fact, to any such offence, if the same be a felony; or for aiding, abetting, or counselling the commission of any such offence, if the same be a misdemeanor; no person shall be deemed an incompetent witness in support of any such prosecution by reason of any interest which such person may have or be supposed to have in respect of such deed, writing, instrument, or other matter.

3. Where any offender hath been convicted of any felony not punishable with death, and hath endured the punishment to which he hath been adjudged, the punishment so endured shall have the like effects and consequences as a pardon under the great seal as to the felony whereof the offender was so convicted: provided that nothing herein contained, nor the enduring of such punishment, shall prevent or mitigate any punishment to which the offender might otherwise be lawfully sentenced on a subsequent conviction for any other felony.

4. And where any offender hath been convicted of any misdemeanor (except perjury or subornation of perjury), and hath endured the punishment to which he hath been adjudged, he shall not, after the punishment so endured, be deemed to be, by reason of such misdemeanor, an incompetent witness in any court or proceeding, civil or criminal.

#### LIABILITY OF REAL PROPERTY IN INDIA TO PAY DEBTS.

[9 Geo. IV. c. 33.—Passed 27th June, 1828.]

This Act declares and settles the law respecting the liability of the real estates of British subjects and others, situate within the jurisdiction of his Majesty's supreme courts in India, as assets in the hands of executors and administrators, to the payment of the debts of their deceased owners.

#### MADHOUSES (SCOTLAND).

[9 Geo. IV. c. 34.—Passed 27th June, 1828.]

*An Act for altering and amending an act passed in the fifty-fifth year of the reign of his late Majesty, intituled, An Act to regulate Madhouses in Scotland.*

1. This act regulates the granting of licences.

2. A book shall be kept in every house so licensed, in which shall be inserted the name and date of admission of every insane person, and also the death or discharge of every such person, specifying the state of mind in which such person was at the date of such death or discharge, and the cause of his or her death.

3. Whenever any coercion, severity, or restraint, beyond that of solitary confinement, shall be used towards any person confined in such house, an entry shall be made in the aforesaid book on the same day on which such coercion, severity, or restraint shall be first used, setting forth the nature of such coercion, severity, or restraint, together with the special cause thereof; and a similar entry shall be made on each succeeding day, during the continuance of such coercion.

4. These books to be produced to inspectors.

5. No insane person shall be received into any public hospital or public lunatic asylum without a warrant from the sheriff, such as is required by the said recited act in the case of a private madhouse.

6. Houses of reception to be visited by medical men.

7. Ministers empowered to visit madhouses, with the consent in writing of the sheriff, and when the keeper does not hold such visit prejudicial to the patient.

8. Regulations where lunatics are privately confined. No person shall receive into his exclusive care and maintenance (except he be a relative), any one insane person, without an order or certificate signed by two physicians or surgeons, a copy of which certificate is to be transmitted to the sheriff of the county. An annual return is also to be made to the sheriff, of all particulars regarding the insane person.

**OUTSTANDING JUDGMENTS (IRELAND).**

[9 Geo. IV. c. 35.—Passed 27th June, 1828.]

This is an Act to protect purchasers for valuable consideration, in Ireland, against Judgments not revived or redocketed within a limited time.

**SALMON FISHERIES.**

[9 Geo. IV. c. 39.—Passed 15th July, 1828.]

*An Act for the Preservation of the Salmon Fisheries in Scotland.*

By an act passed in the parliament of Scotland in the year 1424, it was forbidden that any salmon be slain from the feast of the Assumption of our Lady until the feast of St. Andrew in winter; and other laws and acts were made and passed at divers times by the parliament of Scotland anent the killing of salmon, kipper, red and black fish, in forbidden time, and the killing and destroying of the fry and smelts of salmon.

By this act the penalties enacted by the said acts are augmented, and the period of the forbidden time altered and extended, and sundry other regulations are made. The most important enactment is, that no salmon, grilse, sea trout, or other fish of the salmon kind, shall be taken between the 14th of September and the 1st of February in any year.

The other regulations require to be carefully understood by all fishermen and other interested persons, as the penalties for their violation are severe.

**COUNTY LUNATIC ASYLUMS.**

[9 Geo. IV. c. 40.—Passed 15th July, 1828.]

By this Act the laws for the erection and regulation of County Lunatic Asylums are amended, and more effectual provision is made for the care and maintenance of pauper and criminal lunatics in England.

**CARE AND TREATMENT OF INSANE PERSONS.**

[9 Geo. IV. c. 41.—Passed 15th July, 1828.]

*An Act to regulate the Care and Treatment of Insane Persons in England.*

1. Repeals the acts now existing for licensing and regulating houses for the reception of insane persons in England.

2. His Majesty's principal Secretary of State for the Home Department, annually, on the first day of August, or within ten days following, to appoint not less than fifteen persons to be commissioners, during the space of one year, for licensing and visiting all houses within the cities of London and Westminster, and within seven miles thereof, and within the county of Middlesex, for the reception of two or more insane persons; of which commissioners five at the least shall be physicians.

3. In case of the death or removal of any of the commissioners, others are to be appointed by the secretary of state.

4. Commissioners to act upon oath.

5. No person shall be appointed commissioner who shall be, or who shall have been within the two years then next preceding, directly or indirectly interested in the keeping any house licensed for the reception of insane persons.

7. Treasurer and clerk to be appointed by the Secretary of State for the Home Department.

9. Meetings of commissioners to grant licences on the first Wednesday in the months of January, April, July, and October, in every year.

10. Justices at Quarter Sessions to grant licences in all other parts than London, &c.

11. The said justices shall, at the Michaelmas General Quarter Sessions of the Peace in every year, appoint three or more justices of the peace, and also one or more physician or surgeon or apothecary, to act as visitors of each house of reception for insane persons within the county.

12. A clerk to such visitors shall be appointed by the justices at the Quarter Sessions.

13. All persons who shall apply for a licence for keeping a house for the reception of two or more insane persons, shall give notice to the clerk of the commissioners, or to the clerk of the peace for the county, fourteen days prior to any of the quarterly meetings of the said commissioners, or to any general quarter session for the county, which notice shall contain the christian and surname of the person, and his place of abode; and in case such person does not propose to reside himself in the said house, the name and previous occupation of the superintendant who is to reside therein; and such notice shall be accompanied by a plan of every such house, to be drawn upon a scale of not less than one eighth of an inch to a foot, with a description of the situation thereof, and of every room and apartment therein, and a statement of the greatest number of patients proposed to be received into such house.

14. Upon alteration of house, notice and amended plan to be given to the clerk of the commissioners or the clerk of the peace.

15. The licences are to be made out by the clerk of the commissioners or the clerk of the peace, and to be renewed yearly; and there shall be paid for every licence, exclusive of the sum to be paid for the stamp, the sum of two shillings and sixpence for every parish patient, and the sum of ten shillings for every other insane person: provided, that for no licence to be so granted shall be paid less than fifteen pounds.

17. If at any time a majority of any five of the commissioners (one whereof not being a physician or surgeon), or any three visitors, shall recommend to his Majesty's principal secretary of state for the home department, that any licence should be revoked, it shall be lawful for such secretary of state to revoke the same: provided, that in case of such revocation being proposed, notice in writing shall be given to the parties complained of, seven days previous to the transmission of such recommendation to such secretary of state.

18. When the commissioners or justices of the peace shall refuse to renew any licence, notice thereof is to be given to the secretary of state, who is empowered to confirm such refusal: but the original licence shall remain in force until such confirmation.

19. After three calendar months from the commencement of this act, it shall not be lawful for any person to keep a house for the reception of any two or more insane persons, without a licence for that purpose first had and obtained in the manner directed by this act.

20. Every house licensed shall be visited by three at least of the commissioners (one of whom shall not be a medical practitioner), or by two at least of the visitors appointed at quarter sessions, at least four times in every year, on such days, and at such hours of the day, between the hours of eight in the morning and six in the evening, from the 21st of September to the 21st of March; and between the hours of six in the morning and eight in the evening, from the 21st of March to the 21st of September in each year, and with or without notice, and for such length of time as they shall think fit; and they are hereby empowered to examine the persons confined therein in such manner as they shall see fit: provided always, that it shall not be lawful for the clerk of the said commissioners or of the said visitors to inspect or visit any of the patients confined in such house.

21. The concealing of any insane person from the inspection of the commissioners shall be deemed a misdemeanor.

22. It shall be lawful for the commissioners or visitors upon receiving information upon oath, which oath they are or any one of them is empowered to administer, that the party making such oath hath cause to suspect, and doth verily believe that some malpractices have taken place in any house, which malpractices cannot be ascertained by examination and inspection during the day, respectively to visit and to inspect any such house at such hour of the night as to them shall seem advisable.

23. It shall be lawful for the commissioners or visitors to require any person to appear before them to testify the truth touching any matters relating to the execution of the powers given by this act.

24, 25. There shall be kept in every house of reception a book or register, in which the said commissioners and visitors, within their respective jurisdictions, shall at every such visitation make minutes in writing of the state and condition of such houses, as to the care of the patients therein, and such minutes are to be transcribed into a general register to be kept by the clerk of the commissioners.

26, 27, 28. The clerk of the commissioners, and the clerks of the visitors, shall, within one month previous to the first day of June in every year, prepare a full and complete report of the several houses within their respective jurisdictions.

29. No person, not being a parish patient, shall be received into any house, without a certificate in the manner directed by this act; and if any person shall knowingly and wilfully receive any insane person, or person represented or alleged to be insane, without such certificate bearing date not more than fourteen days previous to such reception, and shall not at the time of receiving such patient make a minute in writing or entry of the christian and surname, occupation, and place of residence of the person by whom such patient shall be brought, or by whose authority such patient shall be delivered to his care, every person so offending shall be deemed guilty of a misdemeanor.

30. And every certificate shall be signed by two medical practitioners; who shall have separately visited and personally examined the patient; and such certificate shall state that such insane person is a proper person to be confined, and the day on which he or she shall have been so examined; and also the christian and surname, and place of abode, of the person by whose direction or authority such patient is examined, and the degree of relationship, or other circumstance of connection between such person and the insane person; and the name, age, place of residence, former occupation, and the asylum (if any) in which such patient shall have been confined; and whether such person shall have been found lunatic or of unsound mind under a commission issued for that purpose by the lord chancellor; and every such certificate shall, if the same be not signed by two medical practitioners, state the special circumstances (if any) which shall have prevented the patient being separately visited by two medical practitioners; and any patient may be admitted into any such licensed house upon the certificate of one medical practitioner only under the special circumstances aforesaid, provided such certificate shall be further signed by some other medical practitioner within seven days next after the admission of such patient; and any person who shall, knowingly, and with intention to deceive, sign any such certificate, untruly setting forth any such particulars, shall be deemed guilty of a misdemeanor; nevertheless, if any special circumstance shall exist, which may prevent the insertion of any of the particulars aforesaid, the same shall be specially stated in such certificate: provided always, that no physician, surgeon, or apothecary, shall sign any certificate of admission to any house of which he is wholly or partly the proprietor, or the regular professional attendant; and any physician, surgeon, or apothecary, who shall sign or give any such certificate, without having visited and personally examined the individual to whom it relates, shall be deemed to be guilty of a misdemeanor.

31. No parish pauper shall be received into any house without an order under the hands and seals of two justices of the peace, or an order signed by one of the overseers of the poor and the officiating clergyman of the parish, and also a certificate signed by one physician, surgeon, or apothecary, that such person is a proper person to be confined.

32. Notice is to be given to the clerk of the commissioners, or to the clerk of the visitors, by the keepers of houses, &c. within seven days after the admission of every patient, under pain of being deemed guilty of a misdemeanor.

33. The like notice is to be given within three days next after the removal or death of a patient, under the like penalty.

34. If any person shall apply to one of the commissioners, or to any



justice of the peace of the county in which any house is situate, in order to be informed whether any particular person is confined, and the said commissioner or justice shall think it reasonable to permit such inquiry to be made, and shall sign an order directed to the clerk for that purpose, the said clerk is required, upon the receipt of such order, to make search; and if it shall appear that the person is or has been confined in any of the said houses, the said clerk shall immediately deliver to the person applying, in writing, the name of the keeper, the situation of such house, and a copy of the order and certificate, upon payment of the sum of seven shillings.

35. In every house of reception for insane persons there shall, if it contain one hundred patients, be a resident physician, surgeon, or apothecary: and every such house, containing less than one hundred patients, in case such house shall not be kept by a physician, surgeon, or apothecary, shall be visited twice in every week by a physician, surgeon, or apothecary; and such resident attendant, or visiting physician, surgeon, or apothecary, is hereby respectively required to report to the keeper the condition of the house, and state of health of the patients; and shall, once in every week, enter and sign the same in a book of entries to be kept at every such house.

36. Persons by whose authority any patients have been delivered to such houses, shall visit or appoint some person to visit them, once in six months.

37. If it shall appear, after three separate and distinct visits to be made by the said commissioners or visitors, three of whom shall be physicians or surgeons, or one of which visitors shall be a medical practitioner, (twenty-one days at the least to intervene between each visit,) that any person is detained without sufficient cause, and notice thereof shall have been duly given to the keeper, and to the person by whose authority such person was sent, it shall be lawful for the said commissioners at one of their quarterly meetings, or at a meeting specially summoned at three days notice, or for the justices in quarter sessions, or at a meeting specially summoned at seven days notice, to set such person at liberty: provided, that such power shall not extend to the case of any lunatic who shall have been found of insane mind under a commission issued by the Lord Chancellor, nor to any lunatic confined under any order or authority of his Majesty's principal Secretary of State for the Home Department.

38. The commissioners and visitors are to inquire, and state in the register book, whether divine service is performed in such houses; and if not performed, the keeper shall state the reason.

39. It shall be lawful for the Lord Chancellor, or the Lord Chief Justice of the Court of King's Bench, or the Lord Chief Justice of the Court of Common Pleas, or his Majesty's principal Secretary of State for the Home Department, to employ any commissioner, or medical or other person, to inspect and inquire into the state of any lunatic asylum, public hospital, or other house or place for the confinement of insane persons, and to report to him the result of such inspection and inquiry; and every such medical or other person shall be paid such sum of money for his attendance and trouble, as to his Majesty's principal Secretary of State shall seem an adequate and reasonable allowance.

40. No person shall receive into his exclusive care, except he be a relative, or a committee appointed by the Lord Chancellor, under pain of being deemed guilty of misdemeanor, any one insane person, without first having an order and certificate signed by two medical practitioners; and every such person so having received into his charge any insane person, shall within five days thereof transmit to the clerk of the commissioners in London a copy of such order and certificate, and shall also state the parish and county wherein such house shall be situate, and the name of the occupier thereof, and such order, certificate, and return shall be sealed, and indorsed "Private Return;" and also on the 1st of January, or within seven days thereof, in every year, every such person shall also transmit to such clerk a certificate signed by two physicians, surgeons, or apothecaries, describing the then actual state of such insane person; and

in case of the death or removal of such insane person, he shall forthwith notify the same to such clerk.

41. It shall be lawful for his Majesty's principal Secretary of State, in all cases in which any patient shall die, or have been discharged as cured, to direct, if he shall see fit, that the name of such patient shall be wholly erased from the said register.

42. The Lord Chancellor or the Secretary of State may order visitation of patients in care of relatives.

48. If any action shall be brought against any person for anything done in pursuance of this act, the same shall be commenced within six calendar months next after the fact committed, and shall be laid or brought in the county, city, or place where the cause of action shall have arisen.

49. No action is to be brought, except by order of the commissioners, or by the justices at sessions.

50. Nothing in this act shall extend to the Royal Hospital of Bethlehem, or to any building erected adjacent thereto, for the confinement of criminal lunatics, or to the Royal Military or Naval Hospitals, or to county lunatic asylums.

51. And nothing in this act shall extend to any public hospital, or parts of public hospitals, or other charitable institutions, supported wholly or partly by voluntary contributions, in which lunatics are received, or to any lunatic asylum built and established by voluntary contributions, and supported by applying the excess of payments of the more affluent in reduction of the payment by persons in more limited circumstances, excepting in as far as relates to certificates of admission, and visitations appointed by the Lord Chancellor, or the Lord Chief Justice of the Court of King's Bench, or the Lord Chief Justice of the Court of Common Pleas, or his Majesty's principal Secretary of State for the Home Department, and the transmitting to the clerk of the commissioners an annual report, as hereinbefore directed.

54. Act to continue in force for three years.

#### SOCIETY FOR ENLARGING, BUILDING, AND REPAIRING OF CHURCHES AND CHAPELS.

[9 Geo. IV. c. 42.—Passed 15th July, 1828.]

*An Act to abolish Church Briefs, and to provide for the collection and application of voluntary Contributions for the purpose of enlarging and building Churches and Chapels.*

1. Repeals the 4th Ann, c. 14. intituled *An Act for the better collecting Charity Money on Briefs by Letters Patent, and preventing abuses in relation to such Charities*; except as to such briefs issued before the passing of this act as are now in progress.

2. All such persons as now are or hereafter may become members of the society for promoting the enlargement and building of churches and chapels, are hereby declared to be a body corporate, by the name of "The Incorporated Society for promoting the enlargement, building, and repairing of churches and chapels."

8. The committee of the said society, in the selection of parishes and extra-parochial places to which they shall grant any part of their funds towards the enlarging or building of any churches or chapels, shall have regard to the amount of the population, and also to the disproportion between the number of inhabitants and the present accommodation for attendance upon divine service; and in giving preference among such parishes and extra-parochial places, shall have regard to the proportion of the expense which shall be offered to be contributed or raised by such respective parishes or places, towards the enlargement or building of churches or chapels therein, and to the pecuniary ability of the inhabitants thereof.

9. In granting aid towards the repairs of churches and chapels which have fallen into a state of great dilapidation without neglect or fault of the existing parishioners, and the entire expence of repairing which the

parishioners shall be proved, to the satisfaction of the committee, to be unable to defray, reference shall be had to the amount of money raised by the parishioners by rates or subscription, and to the improvement which it may be proposed to effect in the accommodation for the poor.

10. As often as his Majesty shall be graciously pleased to issue his royal letters, directed respectively to the Archbishops of Canterbury and York, authorizing the collection of voluntary contributions within their several provinces, for the purpose of aiding the enlarging, building, rebuilding, or repairing of churches and chapels in England and Wales, or in any part thereof, in every such case all the contributions so collected shall be paid over to the treasurer of the said society, or his order, and shall be employed by the said society in carrying its designs into effect.

#### STAMP DUTIES.

[9 Geo. IV. c. 49.—Passed 15th July, 1828.]

*An Act to amend the laws in force relating to the Stamp Duties on Sea Insurances; on Articles of Clerkship; on Certificates of Writers to the Signet, and of Conveyancers and others; on Licences to Dealers in Gold and Silver Plate, and Pawnbrokers; on Drafts on Bankers, and on Licences for Stage Coaches, in Great Britain; and on Receipts in Ireland.*

15. All drafts or orders for the payment of any sum of money to the bearer on demand, and drawn in any part of Great Britain, upon any banker, or any person acting as a banker, who shall reside or transact the business of a banker within fifteen miles of the place where such drafts or orders shall be issued, shall be exempted from any stamp duty; provided the place where such drafts or orders shall be issued shall be specified therein; and provided the same shall bear date on or before the day on which the same shall be issued; and provided the same do not direct the payment to be made by bills or promissory notes.

#### CRIMINAL LAWS—IRELAND.

[9 Geo. IV. c. 53, 54, 55, and 56.]

*An Act to repeal several acts and parts of acts in force in Ireland relating to bail in cases of felony, and to certain proceedings in criminal cases, and to the benefit of clergy, and to larceny, and other offences connected therewith, and to malicious injuries to property.*

*An Act for improving the administration of justice in criminal cases in Ireland.*

*An Act for consolidating and amending the laws in Ireland relative to larceny and other offences connected therewith.*

*An Act for consolidating and amending the laws in Ireland relative to malicious injuries to property.*

\* \* The four preceding acts have been passed in order to assimilate the law of Ireland in those cases to the law of England, and are in substance the same as cap. 27, 28, 29, 30, of the last session of parliament;—for which see the Companion for 1828.

#### POLLING AT ELECTIONS.

[9 Geo. IV. c. 59.—Passed 15th July, 1828.]

*An Act to regulate the mode of taking the Poll at the Election of Members to serve in Parliament for Cities, Boroughs, and Ports in England and Wales.*

1. From and after the passing of this act, at every election of members to serve in parliament for a city, borough, town, or port, in England or Wales, where the number of electors exceed six hundred,—if one or more candidates beyond the number which the city, &c. is entitled to return be put in nomination, and a poll be demanded, the returning officer, on receiving a requisition signed by a candidate or his agent, is to divide the polling place in compartments, so that there shall be a com-

partment for every six hundred voters. Each compartment to be provided with sufficient accommodation for the poll-clerk, for an agent and a check-clerk, for each of the candidates, and with a distinct avenue for the voters; and if sufficient space cannot be found in the usual place for taking the poll, the returning officer is to erect in some convenient place (within the city, &c.) a polling place, and divide it into compartments, and there take the poll. For each compartment, the returning officer is to appoint a clerk to take the poll, and to administer to the voters—when required by any elector or candidate, or person acting for any candidate—such oaths as may by law be required of them: the clerk to receive not exceeding one guinea per day.

2. All reasonable expenses of providing the polling places and of paying the clerks, are to be defrayed by the candidates, in equal portions; but, if a person be nominated as a candidate, and (if present) such person should not declare his assent thereto at the time of nomination,—or, if not present, should not signify his assent in writing,—the person putting such candidate in nomination shall be liable for an equal share of the expense.

3. During the time of polling, the returning officer or his assessor is to continue in some convenient place, for the purposes of deciding on the validity of disputed votes; and if a vote be objected to by a candidate or person on his behalf, the poll is not on that account to be delayed, but the poll-clerk is to enter the name of the voter on the poll-book, but not then to receive his vote, but such vote is to be referred to the returning officer (or assessor) who is to decide on the validity of the vote. The returning officer (or assessor) is to keep a list of all votes which are referred to him for decision; and—where the voters are ready to be examined—proceed to decide as to the validity of their votes, in the order in which they have been referred.

4. So much of 25 Geo. III. as allows the poll at an election for a city, borough, town, or port, within England, or for the town of Berwick-upon-Tweed, to continue for fifteen days, is hereby repealed.

5. For any city, borough, town, or port, in England or Wales, no poll to continue longer than eight days; (Sundays excepted;) and if continued until the eighth day, the poll to finally close at or before three o'clock in the afternoon of the same day.

6. Before proclamation of the return is made, if a candidate or his agent, or two electors, should certify to the returning officer that some votes have been referred to the returning officer (or assessor) for decision, and that no decision has been declared, then proclamation is not to be made until three o'clock in the afternoon of the third day following, (unless the disputed votes be decided before that time,) but the returning officer (or his assessor) is to continue to decide as to the validity of the disputed votes, and to cause the names of those persons whose votes have been adjudged valid to be added to the poll. If, at three o'clock of such third day, there should still remain some votes on which no decision is made, the returning officer is, notwithstanding, forthwith to proclaim the return.

7. None of the provisions of this act to extend to Scotland or Ireland, nor to the cities of London or Westminster.

#### IMPORTATION OF CORN.

[9 Geo. IV. c. 60.—Passed 15th July, 1828.]

*An Act to amend the Laws relating to the Importation of Corn.*

1, 2. Repeal former acts.

3. And whereas it is expedient that corn, grain, meal, and flour, the growth, produce, and manufacture of any foreign country, or of any British possession out of Europe, should be allowed to be imported for consumption in the United Kingdom; it is enacted, That there shall be levied and paid upon all corn, grain, meal, or flour entered for home consump-

tion in the United Kingdom from parts beyond the seas, the several duties specified and set forth in the table to this act annexed.

4. No corn, grain, meal, or flour, shall be shipped from any port in any British possession out of Europe, as being the produce of any such possession, until the owner, proprietor, or shipper thereof, shall have made and subscribed, before the collector or other chief officer of customs at the port of shipment, a declaration in writing, specifying the quantity of each sort of such corn, grain, meal, or flour, and that the same was the produce of some British possession out of Europe to be named in such declaration, nor until such owner, proprietor, or shipper, shall have obtained from the collector or other chief officer of the customs at the said port a certificate, under his signature, of the quantity of corn, grain, meal, or flour, so declared to be shipped. And before any corn, grain, meal, or flour, shall be entered at any port or place in the United Kingdom, as being the produce of any British possession out of Europe, the master of the ship importing the same shall produce and deliver to the collector or other chief officer of customs of the port or place of importation, a copy of such declaration, certified to be a true and accurate copy thereof under the hand of the collector and other chief officer of customs at the port of shipment before whom the same was made, together with the certificate, signed by the said collector, or other chief officer of customs, of the quantity of corn so declared to be shipped; and such master shall also make and subscribe, before the collector or other chief officer of customs at the port or place of importation, a declaration in writing, that the several quantities of corn, grain, meal, or flour on board such ship, and proposed to be entered under the authority of such declaration, are the same that were mentioned and referred to in the declaration and certificate produced by him, without any admixture or addition. And if any person shall, in any such declaration, wilfully and corruptly make any false statement respecting the place of which any such corn, grain, meal, or flour was the produce, or respecting the identity of any such corn, grain, meal, or flour, such person shall forfeit 100*l.* and the corn, grain, meal, or flour, shall also be forfeited. Provided, that the declarations aforesaid shall not be required in respect of any corn, grain, meal, or flour, which shall have been shipped within three months next after the passing of this act.

5. It shall not be lawful to import into the United Kingdom, for consumption there, any malt, or to import, for consumption, into Great Britain, any corn ground, except wheat meal, wheat flour, and oatmeal; or to import, for consumption, any corn ground, into Ireland: and if any such article shall be imported, the same shall be forfeited.

6. Monthly accounts of importation to be published in the London Gazette.

7. If it shall be made to appear to his Majesty in council that any foreign state hath subjected British vessels to any higher duties or charges than are levied on national vessels, or hath subjected goods, the growth, produce, or manufacture of any of his Majesty's dominions, when imported from any of such dominions in British vessels, to any other or higher duties or charges whatever than are levied on such or the like goods, of whatever growth, produce, or manufacture, when so imported in national vessels, or hath subjected any article of the growth, produce, or manufacture of his Majesty's dominions, when imported from any of such dominions in British vessels, or in national vessels, to any duties or charges which would not be payable on the like article being of the growth, produce, or manufacture of any other country, and imported from such other country in national vessels, or that any such foreign state or power hath granted any bounties, drawbacks, or allowances upon the exportation of any articles the growth, produce, or manufacture of the dominions of any other foreign state or power, which hath not also been granted upon the exportation of such or the like articles being the growth, produce, or manufacture of his Majesty's dominions; then it shall be lawful for his Majesty, with the advice of his Privy Council, to

prohibit the importation of any sort of corn, grain, meal, or flour, from the dominions of any such foreign state or power.

8. Weekly returns of the purchases and sales of British corn shall be made in the manner hereinafter directed, in the following cities and towns:—

London	Windsor	Norwich	Lowth
Uxbridge	Aylesbury	Yarmouth	Boston
Hertford	Ipswich	Lynn	Sleaford
Royston	Woodbridge	Thetford	Stamford
Chelmsford	Sudbury	Watton	Spalding
Colchester	Huntingdon	Diss	Derby
Rumford	Hadleigh	East Dereham	Northampton
Maidstone	Stowmarket	Harleston	Leicester
Canterbury	Bury St. Edmunds	Holt	Nottingham
Dartford	Beccles	Aylesham	Worcester
Chichester	Bungay	Fakenham	Coventry
Guildford	Lowestoft	North Walsham	Reading
Lewes	Cambridge	Lincoln	Oxford
Rye	Ely	Gainsborough	Wakefield
Bedford	Wisbeach	Glanford Bridge	Warminster
Birmingham	Carlisle	Carmarthen	Truro
Leeds	Whitehaven	Cardiff	Bodmin
Newark	Cockermouth	Gloucester	Launceston
York	Penrith	Cirencester	Redruth
Bridlington	Egremont	Tetbury	Helstone
Beverley	Appleby	Stow-on-the-Wold	St. Austel
Howden	Kirby-in-Kendal	Tewkesbury	Blandford
Sheffield	Liverpool	Bristol	Bridport
Hull	Ulverston	Taunton	Dorchester
Whitby	Lancaster	Wells	Sherbourne
New Malton	Preston	Bridgewater	Shaston
Durham	Wigan	Frome	Wareham
Stockton	Warrington	Chard	Winchester
Darlington	Manchester	Monmouth	Andover
Sunderland	Bolton	Abergavenny	Basingstoke
Barnard Castle	Chester	Chepstow	Fareham
Walsingham	Nantwich	Pont-y-Pool	Havant
Belford	Middlewich	Exeter	Newport
Hexham	Four Lane Ends	Barnstaple	Ringwood
Newcastle-upon-Tyne	Denbigh	Plymouth	Southampton
Morpeth	Wrexham	Totness	Portsmouth
Alnwick	Carvarvon	Tavistock	
Berwick-upon-Tweed	Haverfordwest	Kingsbridge	

In each of which said cities and towns there shall be appointed, in manner hereinafter directed, an inspector of corn returns.

9. Appointment of comptroller of corn returns.

13. Lord Mayor to appoint inspector for the city of London.

15 and 22. Dealers in corn, &c. not to be inspectors.

18. Every person who shall carry on trade or business in the city of London, or within five miles from the Royal Exchange, as a corn factor, or as an agent employed in the sale of British corn, shall make and deliver to the Lord Mayor, or one of the Aldermen, a declaration, that the returns made by him shall in all respects be conformable to the provisions of the said act.

19. And every such corn factor and other person shall return, or cause to be returned, on Wednesday in each week, to the inspector of corn returns for the city of London, an account in writing, signed with his or her own name, or the name of his or her agent, of the quantities of each respective sort of British corn sold during the week ending on and including the next preceding Tuesday, with the prices thereof, and the amount of every parcel, with the total quantity and value of each sort of corn, and

by what measure or weight the same was sold, and the names of the buyers thereof, and of the persons for and on behalf of whom such corn was sold; and it shall be lawful for any such inspector to deliver to any person making or tendering any such returns a notice in writing, requiring him or her to declare and set forth therein where and by whom, and in what manner any such British corn was delivered to the purchaser or purchasers thereof.

20. Inspectors to be appointed in other places by justices of the peace for the several and respective counties, ridings, or divisions thereof, and by mayors in towns having separate jurisdictions.

25. Every person who shall deal in British corn at or within any such city or town as aforesaid, or who shall at or within any such city or town engage in or carry on the trade or business of a corn factor, miller, maltster, brewer, or distiller, or who shall be the owner or proprietor of any stage coaches, waggons, carts, or other carriages carrying goods or passengers for hire to and from any such city or town, and each and every person, who, as a merchant, clerk, agent, or otherwise, shall purchase at any such city or town any British corn for sale, or for the sale of meal, flour, malt, or bread, made, or to be made thereof, shall, before he or she shall so deal in British corn at any such city or town, or shall engage in or carry on any such trade or business as aforesaid, or shall purchase any British corn for any such purpose as aforesaid, at or within any such city or town, make and deliver, in manner hereinafter mentioned, a declaration that his returns shall in all respects be conformable to the provisions of the said act. Which declaration shall be in writing, and shall be subscribed with the hand of the person so making the same, and shall by him or her, or by his or her agent, be delivered to the mayor or chief magistrate, or to some justice of the peace for such city or town, or for the county, riding, or division in which the same is situate, who are hereby required to deliver a certificate thereof to the inspector of corn returns for any such city or town.

27. All persons who are hereinbefore required to make such declaration, shall, on the first market day which shall be holden in each week within every such city or town aforesaid, at or within which they shall respectively deal in corn, or engage in or carry on any such trade or business, or purchase any corn for any such purpose, to return, or cause to be returned, to the inspector of corn returns for such city or town, an account in writing, signed with their names respectively, of the amount of each and every parcel of each respective sort of British corn bought during the week ending on and including the day next preceding such first market-day, with the price thereof, and by what weight or measure the same was so bought, with the name of the sellers of each of the said parcels, with the names of the person or persons, if any other than the person making such return, for or on account of whom the same was so bought and sold; and it shall be lawful for any such inspector to deliver, to any person making or tendering any such return, a notice in writing requiring him or her to declare and set forth therein where and by whom and in what manner any such British corn was delivered to him or her.

29. Inspectors to transmit returns to comptroller.

30. The average prices of all British corn, by which the rate and amount of the said duties shall be regulated, shall be made up and computed on Thursday in each week, in manner following; that is to say—The said comptroller shall on Thursday in each week, from the returns received by him during the week next preceding, ending on and including the Saturday in such preceding week, add together the total quantities of each sort of British corn respectively appearing by such returns to have been sold, and the total prices for which the same shall thereby appear to have been sold, and shall divide the amount of such total prices by the amount of such total quantities of each sort of British corn, and the sum produced thereby shall be added to the sums in like manner produced in the five weeks immediately preceding the same, and the amount of such sums so added shall be divided by six, and the sum thereby given shall be

deemed and taken to be the aggregate average price of each sort of British corn respectively; and the said comptroller shall cause such aggregate weekly averages to be published in the next succeeding Gazette, and shall on Thursday in each week transmit a certificate of such aggregate average prices to the collector or other chief officer of the customs at each of the several ports of the United Kingdom; and the rate and amount of the duties to be paid under the provisions of this act shall from time to time be regulated and governed at each of the ports of the United Kingdom respectively by the aggregate average prices of British corn at the time of the entry for home consumption of any corn, grain, meal, or flour chargeable with any such duty, as such aggregate average prices shall appear and be stated in the last of such certificates as aforesaid which shall have been received by the collector or other chief officer of customs at such port.

31. Quantities of corn to be computed according, and with reference, to the imperial standard gallon.

42. If any person who is hereby required to make and deliver the declarations hereinbefore mentioned, shall not make and deliver such declarations at the time, and in the form and manner, and to the person or persons hereinbefore directed, every person so offending shall forfeit the sum of twenty pounds for each calendar month during which he shall neglect or delay to make and deliver any such declaration; and if any person who is hereinbefore required to make any return to any such inspector, shall not make such returns, at the time and in the form and manner hereinbefore directed and prescribed, every such offender shall for such his offence forfeit the sum of twenty pounds.

46. And if any person shall make any false and fraudulent statement in any such return as he is hereinbefore directed and required to make, or shall falsely and wilfully include, or procure, or cause to be included in any such return any British corn which was not truly and *bonâ fide* sold or bought, to, by, or on behalf of the person or persons in any such return mentioned in that behalf, in the quantity and for the price therein stated and set forth, every such offender shall be guilty of a misdemeanor.

#### TABLE OF DUTIES TO WHICH THIS ACT REFERS.

IF IMPORTED FROM ANY FOREIGN COUNTRY.

WHEAT—Whenever the average price of wheat, made up and published in manner required by law, shall be 62s. and under 63s. per qr., the duty shall be for every quarter

						£	s	d
—	Whenever such price shall be 63s. and under 64s. the qr.					1	3	8
—	" " " 64s. " 65s. "					1	2	8
—	" " " 65s. " 66s. "					1	1	8
—	" " " 66s. " 67s. "					1	0	8
—	" " " 67s. " 68s. "					0	18	8
—	" " " 68s. " 69s. "					0	16	8
—	" " " 69s. " 70s. "					0	13	8
—	" " " 70s. " 71s. "					0	10	8
—	" " " 71s. " 72s. "					0	6	8
—	" " " 72s. " 73s. "					0	2	8
—	Whenever such price shall be at or above 73s. the qr.					0	1	0

— Whenever such price shall be under 62s. and not under 61s., the duty shall be for every quarter . . . 1 5 8

— And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 61s., such duty shall be increased by one shilling.

BARLEY—Whenever the average price of barley, made up and published in manner required by law, shall be 33s. and under 34s. the quarter, the duty shall be for every quarter . . . 0 12 4



<b>BARLEY</b> - - - And in respect of every integral shilling by which such price shall be above 33s., such duty shall be decreased by 1s. 6d., until such price shall be 41s.					
—	Whenever such price shall be at or above 41s. the qr.		0	1	0
—	Whenever such price shall be under 33s., and not under 32s., the duty shall be for every quarter		0	13	10
- - - - And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 32s., such duty shall be increased by 1s. 6d.					
<b>OATS</b> —Whenever the average price of oats, made up and published in manner required by law, shall be 25s. and under 26s. the quarter, the duty shall be for every quarter				0	9 3
- - - - And in respect of every integral shilling by which such price shall be above 25s., such duty shall be decreased by 1s. 6d., until such price shall be 31s.					
—	Whenever such price shall be at or above 31s. the qr.		0	1	0
—	Whenever such price shall be under 25s., and not under 24s., the duty shall be for every quarter		0	10	9
- - - - And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 24s., such duty shall be increased by 1s. 6d.					
<b>RYE, PEASE, and BEANS</b> —					
—	Whenever the average price of rye, or of pease, or of beans, made up and published in manner required by law, shall be 36s., and under 37s., the quarter, the duty shall be for every quarter			0	15
- - - - And in respect of every integral shilling by which such price shall be above 36s., such duty shall be decreased by 1s. 6d., until such price shall be 46s.					
—	Whenever such price shall be at or above 46s. the qr.		0	1	0
—	Whenever such price shall be under 36s., and not under 35s., the duty shall be for every quarter			0	16 9
- - - - And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 35s., such duty shall be increased by 1s. 6d.					
<b>WHEAT, MEAL, AND FLOUR</b> —					
—	For every barrel, being 196 pounds: a duty equal in amount to the duty payable on 38½ gallons of wheat.				
<b>OATMEAL</b> —For every quantity of 181½ pound: a duty equal in amount to the duty payable on a quarter of oats.					
<b>MAIZE OR INDIAN CORN, BUCK WHEAT, BEER OR BIGG</b> —					
—	For every quarter: a duty equal in amount to the duty payable on a quarter of barley.				
<b>IF THE PRODUCE OF AND IMPORTED FROM ANY BRITISH POSSESSION IN NORTH AMERICA, OR ELSEWHERE OUT OF EUROPE.</b>					
<b>WHEAT</b> —For every quarter				0	5 0
- - - - Until the price of British wheat, made up and published in manner required by law, shall be 67s. per quarter.					
—	Whenever such price shall be at or above 67s. the qr.		0	0	6
<b>BARLEY</b> —For every quarter				0	2 6
- - - - Until the price of British barley, made up and published in manner required by law, shall be 34s. the quarter.					
—	Whenever such price shall be at or above 34s. the qr.		0	0	6
<b>OATS</b> —For every quarter				0	2 0
- - - - Until the price of British oats, made up and published in manner required by law, shall be 25s. per quarter.					

OATS—Whenever such price shall be at or above 25s. the qr.	0	0	6
RYE, PEASE, AND BEANS—			
—— For every quarter		0	3
- - - Until the price of British rye, or of pease, or of			
- beans, made up and published in manner required by			
law, shall be 41s.			
—— Whenever such price shall be at or above 41s. the qr.	0	0	6
WHEAT, MEAL, AND FLOUR—			
—— For every barrel, being 196 pounds: a duty equal in			
amount to the duty payable on 38½ gallons of wheat.			
OATMEAL—For every quantity of 181½ pounds: a duty equal in			
amount to the duty payable on a quarter of oats.			
MAIZE OR INDIAN CORN, BUCK WHEAT, BEER, OR BIGG—			
—— For every quarter: a duty equal in amount to the duty			
payable on a quarter of barley.			

### ALEHOUSE LICENSES.

[9 Geo. IV. c. 61.—Passed 15th July, 1828.]

*An Act to regulate the granting of Licenses to Keepers of Inns, Alehouses, and Victualling Houses, in England.*

1. In every division of every county and riding, and of every division of the county of Lincoln, and in every hundred of a county, (not being within any such division,) and in every liberty division of every liberty, county of a city, county of a town, city, and town corporate, (in England,) there shall be annually holden a special session of the justices of the peace, to be called “the General Annual Licensing Meeting,” for the purpose of granting licenses to persons keeping, or being about to keep inns, alehouses, and victualling houses, to sell exciseable liquors by retail, to be drunk or consumed on the premises therein specified; such meetings to be holden in Middlesex and Surrey, within the first ten days of March, and in every other place between the 20th August, and the 14th September inclusive; and the justices assembled at such meeting, or at any adjournment thereof, (not being disqualified from acting,) may grant licenses to such persons as they think proper.

2. Twenty-one days at the least before each annual meeting, a petty session shall appoint the day, hour, and place upon and in which the annual meeting is to be holden; and also to direct the high constable to order the petty constables to affix on the door of the church, chapel, or other public place, a notice of such meeting, and to leave a copy thereof at the dwelling-house of every person keeping an inn, or who shall have given notice of his intention to keep an inn.

3. No adjourned meeting to be held in or upon any of the five days next ensuing that on which the annual meeting is held; and such adjourned meetings to be held within the month of March, in the counties of Middlesex and Surrey, and of August or September, in every other county.

4. At the annual meeting, the justices are to appoint not less than four, nor more than eight special sessions, at equally distant periods, in order to transfer licenses to such persons intending to keep inns, as to the justices, in their discretion, should seem meet.

5. The high constable is to give notice of every special session, in the same form as for the annual meeting.

6. No justice who is a common brewer, distiller, maker of malt for sale, or retailer of malt, or of any exciseable liquor, or who is concerned in partnership with a common brewer, distiller, maker of malt for sale, or retailer of malt, or of any exciseable liquor, shall act in or be present at a general annual licensing meeting, or at an adjournment thereof, or at a special session, or take part in the discussion or adjudication upon an application for a license, or upon an appeal therefrom. No justice to act in the case of any house licensed, or about to be licensed, of which he is the owner, or agent of the owner, or of any house being in whole or in

part the property of a common brewer, distiller, maker of malt for sale, or retailer of malt, or of any exciseable liquor, to whom such justice is (either by blood or marriage) the father, son, or brother, or of whom he is the partner in any other trade or calling. Every justice who shall offend against this act shall forfeit £100. Not to extend to disqualify a justice from acting, if the legal estate in a house be vested in him as a trustee for a person, or for a charitable or public use.

7 & 8. If at any meeting there should not be present two justices, the justices of an adjoining town or place may act for the purpose of granting or transferring licenses: this is not to extend to the cinque ports.

9. When a question touching the granting, withholding, or transferring a license, or the fitness of a person applying for a license, or of the house intended to be kept, such question is to be determined by a majority of the justices; and every license is to be signed by the majority of justices who are present on the occasion.

10. Every person intending to apply for a license for a house, not heretofore kept as an inn, is to affix a notice on the door of such house, and on the door of the church or chapel of the place in which the house is situate,\* on three several Sundays between the 1st of January and the last day of February, in the counties of Middlesex and Surrey, and elsewhere between the 1st of June and the last day of July, between the hours of ten in the forenoon and of four in the afternoon; and is also to serve a copy of the notice upon one of the overseers, and upon one of the peace officers, within the month of February, in the counties of Middlesex and Surrey, and elsewhere in the month of July; such notices to be written in a legible hand or printed, and to be according to the form in the schedule, and signed by the party intending to make the application, or by his authorized agent, and to set forth the situation of the house in a true and particular manner, and the christian and surname of the party applying, together with the place of his residence, and his trade or calling, during the six months previous to the time of serving the notice.

11. Every person holding a license, or his heirs, executors, administrators, or assigns, (being desirous to transfer the same and intending to apply at the special session,) shall, five days prior to such session, serve a notice upon one of the overseers of the poor and upon one of the peace officers: the notice to be written in a legible hand or printed, and according to the form in the schedule.

12. Any person hindered from attending at a general or special meeting by sickness, infirmity, or other reasonable cause, the justices may grant or transfer a license to the person unable to attend, and deliver it to the person then present on his behalf, proof being first adduced, on oath, that the person applying to be licensed is unable to attend.

13. Every license to be in force (in Middlesex and Surrey) from the 5th of April, and elsewhere from the 10th of October, for one year and no longer; and every license granted at any other time or place, or in any other form than is hereby directed, shall be utterly void to all intents and purposes.

14. If any licensed person should die, or be rendered incapable by sickness, or other infirmity, of keeping an inn, or should become bankrupt, or take the benefit of the insolvent act,—or if a licensed person, or his heirs, executors, administrators, or assigns, should remove from or yield up his licensed house,—or if the occupier of such house, being about to quit the same, should have wilfully omitted, or should have neglected to apply at the annual licensing meeting, or at an adjournment thereof, for a continuation of his license,—or if such house should be, or be about to be pulled down for a public purpose; or should be by fire, tempest, or other unforeseen calamity, rendered unfit for the legal purposes of an inn,—in any one of the above-mentioned cases, the justices may grant a license to the heirs, &c. of the person deceased, or to the assigns of the person becoming either bankrupt or insolvent, or to a new occupier, or

\* If there be no church or chapel, in some conspicuous place in the parish.

to a person to whom the heirs, &c. have made over their interest; or to grant a license to the person whose house has been or shall be about to be pulled down, and who intends to open another convenient house as an inn. Every such license to continue in force from the day it is granted until the 5th April, or the 10th October, as the case may be. Every person intending to apply (in any of the before-mentioned cases) for a license to sell exciseable liquors, in a house in which such liquors have not been sold by retail, by virtue of a license granted at the annual meeting, such person is to cause to be affixed, (on some Sunday within six weeks before the special session, between the hours of ten in the forenoon and four in the afternoon,) on the door of the church or chapel of the place in which the house is situate, the same notice as is hereinbefore directed to be affixed by a person intending to apply to a general meeting.

15. The clerk of the justices may demand and receive for every license, the following sums and no more, *viz.* for the peace officer for serving the notice, *one shilling*; for the clerk of the justices, for the license, *five shillings*; and for preparing the precept and notice, *one shilling and sixpence*. If the clerk should demand or receive any greater sum, or any thing of greater value than the sums herein specified, being in the whole the sum of *seven shillings and sixpence*, he shall forfeit, for every offence, the sum of 5*l.*

16. No sheriff's officer, or officer executing the legal process of a court of justice, to be capable of using any license under this act.

17. No license to be granted by any officer of excise, for the sale of exciseable liquors to be drank on the premises, until a license be previously obtained under this act.

18. Every unlicensed person who shall sell or otherwise dispose of any exciseable liquor, by retail, to be drank in his premises,—or permit any exciseable liquor to be sold or otherwise disposed of by retail, to be drank in his premises; every *licensed* person who shall sell or otherwise dispose of, or permit to be sold or otherwise disposed of, any exciseable liquor, by retail, to be drank in any premises not specified in his license,—he shall, for every such offence, (on conviction before one justice,) forfeit any sum not exceeding 20*l.* nor less than 5*l.*, together with the costs of the conviction. No penalty to be incurred by the heirs, &c. of a licensed person, who shall die, become bankrupt, or take the benefit of an insolvent act, before the expiration of his license, if the disposal of exciseable liquor be made in the premises specified in the license, and take place prior to the next special session, unless such special session should be held within fourteen days after the death, bankruptcy, or insolvency of the licensed person, then to the special session which is to be held immediately afterwards.

19. Every licensed person shall, if required, dispose of all exciseable liquors by retail, (except in quantities less than half a pint,) by the gallon, quart, pint, or half pint measure,—according to the imperial standard; or in default thereof, the offender to forfeit the illegal measure, and pay not exceeding forty shillings, together with the costs of the conviction, to be recovered (before one justice) within thirty days after the commission of the offence. Such penalty to be over and above any other penalty, to which the offender is liable under any other act.

20. Where any riot or tumult may happen, or be expected to take place, two justices may direct every licensed person to close his house; and if any house be kept open at or after the hour at which the justices have ordered the house to be closed, the owner thereof shall be deemed not to have maintained good order therein.

21. Every licensed person, who shall be convicted before two justices of an offence against the tenor of his license, shall—unless proof be adduced that he has been previously convicted within three years—be adjudged to be guilty of a first offence, and to pay any sum not exceeding 5*l.*, together with the costs of the conviction; if proof be adduced that he has been previously convicted, he shall be adjudged to be guilty of a

second offence, and to pay any sum not exceeding 10*l.*, together with the costs of the conviction; if proof be adduced that he has been previously convicted of two separate offences, the justices are required to adjourn the case to the next special session, or to the annual meeting, if such meeting take place before the special session. The justices are to issue their summons to such licensed persons requiring him to appear at the special session, or at the annual meeting, and to bind (in recognizances) all persons making a charge, or who shall have knowledge of the circumstances thereof; and if proof be given at such special session, &c., that the licensed person is guilty, he shall forfeit any sum not exceeding 50*l.*, together with the costs of the suit. If at any time before the hearing of any such last mentioned charge, the justices may direct the hearing to be adjourned to the next general or quarter session, there to be inquired into by a jury, or if the licensed person shall, in writing under his hand, require the justices to direct the hearing to be so adjourned, they may adjourn it accordingly, such licensed person entering into recognizances, with two sureties, personally to appear at such session, to abide the judgment of the court, and to pay the costs which may be awarded. The court of general or quarter session, is to direct a jury to be impanelled, and upon their verdict of *guilty*, to adjudge the offender guilty of a third offence, and punish him by fine, not exceeding 100*l.*, or adjudge his license to be forfeited. If the license be forfeited, every excise license shall also be forfeited; and the offender is to be deemed incapable of selling exciseable liquors by retail in any inn for three years. Upon sufficient cause shown, the court may adjourn the hearing of the charge to the next general or quarter session, when the case is to be finally determined.

22. If no fit and proper person should appear to prosecute a charge directed to be adjourned to the general or quarter session, the justices may direct a peace officer of the place, in which the house is situate, to carry on all proceedings, who is to be paid his expenses out of the county rates.

23. If a person be summoned as a witness, either on the part of the complainant or of the accused, and neglect to appear at the time and place appointed, and who shall not make reasonable excuse for his neglect,—or appearing, and refuse to be examined, on oath or affirmation, and give evidence,—he shall forfeit any sum not exceeding 10*l.*

24. Every penalty imposed by this act upon a justice, may be recovered, by action of debt, in any of the courts at Westminster; one moiety of each penalty to be for the use of his majesty, and the other moiety to him who shall sue for the same.

25. If an offender neglect to pay any penalty and costs, within the period appointed by a justice, a distress warrant may be issued to levy the amount on the goods and chattels of the offender, together with the costs of the distress and sale; but if sufficient distress cannot be had, the offender is to be committed to the common gaol, for any term not exceeding one calendar month, if the penalty be not above 5*l.*; for any term not exceeding three calendar months, if the penalty be above 5*l.*, and not more than 10*l.*; and for any term not exceeding six calendar months, if the penalty be above 10*l.* If at any time previous to the expiration of the term of imprisonment, the offender should cause to be paid the penalty and costs, and the costs of his apprehension and conveyance to the common gaol, he is to be forthwith discharged.

26. If a justice think fit, he may award a portion of a penalty (not exceeding one moiety) to the prosecutor, and the remainder to the county or place for which the justice may act.

27. If any person think himself aggrieved, by any thing done in execution of this act, he may appeal to the next general or quarter session, (unless such session be held within twelve days after the act complained of,) provided that notice in writing be given of the appeal within five days, and he enter into a recognizance, with two sureties, to appear to try the appeal, to abide the judgment of the court thereupon, and to pay the

costs awarded. The court at such session to hear and determine the appeal, and to make such order therein, with or without costs, as to the court shall seem meet; and if the act appealed against be the refusal to grant, or to transfer a license, and the judgment be in favour of the appellant, the court is to grant or to transfer the license in the same manner as if it had been granted at the annual meeting, or had been transferred at the special session; but, if the court adjudge the judgment to be carried into execution, and the costs awarded to be paid, it shall, if necessary, issue process for enforcing the judgment. No justice to act in an appeal to the general or quarter sessions, from an act done by him in the execution of this act.

28. The justices may summon any person as a witness, whose evidence may be material, to appear at a general or quarter sessions; and if he should refuse to be bound in recognizance for his appearance, the justice may commit him to the common gaol, there to remain until he enter into such recognizance, or be otherwise discharged.

29. In every case where notice of appeal against the judgment of a justice has been given, and such appeal be dismissed, or the judgment affirmed, or the appeal abandoned, the court shall order the party who has appealed, or intended to appeal, to pay to the justice sufficient costs to indemnify him from all charge whatever; and if the party neglect to pay the same, the court may order him to be committed to the common gaol, there to remain until the costs be satisfied. If the judgment be reversed, the court (if it think fit) shall order the treasurer of the county or place, to pay the justice a sufficient sum to indemnify him from all costs and charges whatsoever.

30. Every action against a justice, constable, or any other person, shall be commenced within three calendar months after the cause thereof has arisen, and not afterwards; who may plead the general issue, and give the special matter in evidence.

31. Every conviction under this act shall be on the oath or oaths of one or more credible witnesses; and any justice (not disqualified) acting for the place where the offence is committed, is authorized to administer the same.

32. Gives the form of conviction.

33. Every conviction to be returned to the next general or quarter session of the peace, and delivered to the clerk of the peace, to be by him filed among the records of the court.

34. No conviction under this act, nor any adjudication made on appeal therefrom, shall be quashed for want of form, or be removed by writ of certiorari or otherwise into a superior court; and no warrant of commitment to be held void by reason of a defect therein, if it be therein alleged that the party has been convicted, and that there is a good conviction to sustain the same.

35. This act to commence on the 10th of October, 1828; and from and after that time, the former licensing acts shall be and the same are hereby repealed, except only such parts as repeal former acts, or parts of acts; and except, also, that all licenses granted and recognizances entered into under the acts hereby repealed, or any of them, or under the 3 Geo. IV. c: 77, "An act for amending the laws for regulating the manner of licensing alehouses in England, and for the more effectually preventing disorders therein," shall remain in full force until the end of the terms for which such licenses or recognizances have been or may be granted or entered into. All offences against the tenor of such licenses, or in breach of the conditions of such recognizances, and all offences committed against the above repeated acts, before the commencement of this act, may be prosecuted, determined, and punished, as if this act had not been made; and all offences committed after the commencement of this act, shall be prosecuted, determined, and punished, under the provisions of this act.

36. Nothing in this act contained to extend to alter or affect any right or privilege of the Universities of Oxford or Cambridge, or the powers of the chancellors or vice-chancellors of such universities; or the master,

wardens, freemen, and commonalty of the Vintner's company, but not to extend to those freemen of such company who have obtained their freedom by redemption; nor to alter the time of granting licenses in the city of London. This act not to alter any law relating to the excise, except expressly provided for; nor to prohibit any person from selling beer in booths, or other places at the time and within the limits of the ground or place, in or upon which any lawful fair is holden, in the same manner as such person was authorized to do before the passing of this act.

37. In order to remove doubts as to the meaning of certain words in this act, the word 'justice' to be deemed justice of the peace; 'treasurer of the county or place,' to include any officer acting in that capacity; 'peace-officer,' to include a petty constable, tithing man, head-borough, beadle, or bailiff; 'parish officer,' to include any church-warden, chapel-warden, or overseer of the poor; and the word 'party' to include any number of persons: and that the meaning of the several words should not be restricted, although the same may be subsequently referred to in the singular number and masculine gender only, the words 'notice,' 'license,' 'adjournment,' 'day,' 'house,' and 'place,' are each to include any number of notices, licenses, adjournments, days, times, houses, or places; and the word 'inn,' to include any inn, alehouse, or victualling house, in which is sold, by retail, any exciseable liquor, to be drank or consumed on the premises; and the words 'exciseable liquor,' are to include all beer, or other fermented malt liquor, sweets, cider, perry, wine, or other spirituous liquor which now is, or may hereafter be charged with duty, either by customs or excise.

#### SCOTCH AND IRISH PROMISSORY NOTES.

[9 Geo. IV. c. 65.—Passed 15th July, 1828.]

*An Act to restrain the negotiation, in England, of Promissory Notes and Bills under a limited sum, issued in Scotland or Ireland.*

1. If any body politic or corporate, or person, shall, after the 5th of April, 1829, by any art, device, or means whatsoever, publish, utter, negotiate, or transfer, in any part of England, any promissory or other note, draft, engagement, or undertaking in writing, made payable on demand to the bearer thereof, and being negotiable or transferable, for the payment of any sum of money less than five pounds, or on which less than the sum of five pounds shall remain undischarged, which shall have been made or issued, or shall purport to have been made or issued, in Scotland or Ireland, or elsewhere out of England, wheresoever the same shall or may be payable, every such body politic or corporate, or person, shall forfeit for every such offence any sum not exceeding twenty pounds, nor less than five pounds.

4. Nothing herein contained shall extend to any draft or order drawn by any person on his or her banker, or on any person acting as such banker, for the payment of money held by such banker or person to the use of the person by whom such draft or order shall be drawn.

#### DISCOVERY OF THE LONGITUDE.

[9 Geo. IV. c. 66.—Passed 15th July, 1828.]

This Act repeals the Laws now in force relating to the discovery of the Longitude at Sea.

#### RETAIL BREWERS' ACT AMENDMENT.

[9 Geo. IV. c. 68.—Passed 19th July, 1828.]

By this act to amend an act of the fifth year of his present Majesty, it is enacted, that it shall be lawful for any brewer licensed to sell beer by retail, to vend the same between the hours of four in the morning and ten in the evening, instead of between the hours of six in the morning and nine in the evening.

## DESTRUCTION OF GAME.

[9 Geo. IV. c. 69.—Passed 19th July, 1828.]

*An Act for the more effectual prevention of Persons going Armed by Night for the Destruction of Game.*

After repealing the 57 Geo. III. c. 90, intituled, *An act for prevention of persons going armed by night for the destruction of game, and for repealing an act made in the last session of parliament relating to rogues and vagabonds*; this act enacts, That if any person shall, by night, unlawfully take or destroy any game or rabbits in any land, whether open or inclosed, or shall by night unlawfully enter or be in any land, whether open or inclosed, with any gun, net, engine, or other instrument, for the purpose of taking or destroying game, such offender shall, upon conviction before two justices, be committed for the first offence to the common gaol or house of correction for any period not exceeding three calendar months, there to be kept to hard labour, and at the expiration of such period shall find sureties by recognizance, or in Scotland by bond of caution, himself in ten pounds, and two sureties in five pounds each, or one surety in ten pounds, for his not so offending again for the space of one year next following; and in case of not finding such sureties, shall be further imprisoned and kept to hard labour for the space of six calendar months, unless such sureties are sooner found. And in case such person shall so offend a second time, and shall be thereof convicted before two justices of the peace, he shall be committed to the common gaol or house of correction for any period not exceeding six calendar months, there to be kept to hard labour; and at the expiration of such period shall find sureties by recognizance, or bond as aforesaid, himself in twenty pounds, and two sureties in ten pounds each, or one surety in twenty pounds, for his not so offending again for the space of two years next following; and in case of not finding such sureties, shall be further imprisoned and kept to hard labour for the space of one year, unless such sureties are sooner found. And in case such person shall so offend a third time, he shall be guilty of a misdemeanor, and shall be liable, at the discretion of the court, to be transported for seven years, or to be imprisoned and kept to hard labour in the common gaol or house of correction for any term not exceeding two years. And in Scotland, if any person shall so offend a first, second, or third time, he shall be liable to be punished in like manner as is hereby provided in each case.

2. Where any person shall be found upon any land committing any such offence as is hereinbefore mentioned, it shall be lawful for the owner or occupier of such land, or for any person having a right or reputed right of free warren or free chase thereon, or for the lord of the manor or reputed manor wherein such land may be situate; and also for any gamekeeper or servant of any of the persons herein mentioned, or any person assisting such gamekeeper or servant, to seize and apprehend such offender upon such land; or, in case of pursuit being made, in any other place to which he may have escaped therefrom, and to deliver him, as soon as may be, into the custody of a peace officer, in order to his being conveyed before two justices of the peace; and in case such offender shall assault or offer any violence with any gun, crossbow, fire-arms, bludgeon, stick, club, or any other offensive weapon whatsoever, towards any person hereby authorized to seize and apprehend him, he shall, whether it be his first, second, or any other offence, he guilty of a misdemeanor, and, being convicted thereof, shall be liable, at the discretion of the court, to be transported beyond seas for seven years, or to be imprisoned and kept to hard labour in the common gaol or house of correction for any term not exceeding two years; and in Scotland, whenever any person shall so offend, he shall be liable to be punished in like manner.

3. Where any person shall be charged on the oath of a credible witness, or in Scotland on the application of the Procurator Fiscal of court, before any justice of the peace, with any offence punishable upon summary con-



viction under this act, the justice may issue his warrant for apprehending such person, and bringing him before two justices of the peace.

4. The prosecution for every offence punishable upon summary conviction by virtue of this act shall be commenced within six calendar months after the commission of the offence; and the prosecution for every offence punishable upon indictment, or otherwise than upon summary conviction, by virtue of this act, shall be commenced within twelve calendar months after the commission of such offence.

6. Any person who shall think himself aggrieved by such summary conviction may appeal to the next general or quarter sessions, which shall be holden not less than twelve days after such conviction, for the county, riding, or division wherein the cause of complaint shall have arisen; such person to give a notice in writing to the complainant, of the cause and matter of such appeal, within three days after such conviction, and seven days, at the least, before such sessions; and shall also either remain in custody until the sessions, or within such three days enter into a recognizance, or bond of caution in Scotland, with a sufficient surety, before a justice of the peace, conditioned personally to appear at the said sessions, and to try such appeal, and to abide the judgment of the court, and to pay such costs as shall be awarded by the court; and upon such notice being given, and such recognizance or bond being entered into, the justice before whom the same shall be entered into shall liberate such person, if in custody: and the court, at such session, shall hear and determine the matter of the appeal, and shall make such order therein, with or without costs to either party, as to the court shall seem meet; and in case of the dismissal of the appeal, or affirmance of the conviction, shall order the offender to be punished, according to the conviction, and to pay such costs, as shall be awarded, and shall, if necessary, issue process for enforcing such judgment.

9. If any persons, to the number of three or more together, shall by night unlawfully enter, or be in any land, whether open or enclosed, for the purpose of taking or destroying game or rabbits, any of such persons being armed with any gun, crossbow, fire-arms, bludgeon, or any other offensive weapon, each of such persons shall be guilty of a misdemeanor, and, being convicted thereof, shall be liable, at the discretion of the court, to be transported for any term not exceeding fourteen years, nor less than seven years, or to be imprisoned and kept to hard labour for any term not exceeding three years; and in Scotland any person so offending shall be liable to be punished in like manner.

12. For the purposes of this act the night shall be considered to commence at the expiration of the first hour after sunset, and to conclude at the beginning of the last hour before sunrise.

13. And for the purposes of this act the word "game" shall be deemed to include hares, pheasants, partridges, grouse, heath or moor-game, black game, and bustards.

#### CUSTOMS ACTS AMENDMENT.

[9 Geo. IV. c. 76.—Passed 25th July, 1828.]

By this act various new regulations are prescribed, and new duties inwards and outwards are to be levied.

#### PROMISSORY NOTES (Ireland).

[9 Geo. IV. c. 81.—Passed 25th July, 1828.]

By this Act Promissory Notes issued by Banks, Banking Companies, or Bankers, in Ireland, are made payable at the places where they are issued.

#### SAVINGS BANKS.

[9 Geo. IV. c. 92.—Passed 28th July, 1828.]

*An Act to consolidate and amend the Laws relating to Savings Banks.*

1. All former acts relative to Savings Banks are repealed; provided,

that nothing herein shall invalidate or annul any payments, receipts, or appointments made, or proceedings had, or bonds or securities taken or entered into, or drafts, powers of attorney, certificates, orders, or any instruments whatsoever, executed under the authority of any old or hereby repealed acts.

2. If any number of persons shall form any society for the purpose of establishing and maintaining any institution in the nature of a bank, or receive deposits of money for the benefit of the persons depositing the same to accumulate at compound interest, and to return the whole or any part of such deposit and the produce thereof to the depositors (deducting out of such produce so much as shall be required for the necessary expences attending the management of such institution, but deriving no benefit whatsoever from any such deposit or the produce thereof), they shall be desirous of having the benefit of the provisions of this act, such persons shall cause the rules and regulations established for the management of such institution to be entered, deposited, and filed in manner hereinafter directed, and thereupon shall be deemed to be entitled to and shall have the benefit of the provisions contained in this act; and it shall be lawful for the trustees of such institutions respectively to invest any funds already accumulated, and which shall not have been invested at the time of the passing of this act, and to receive receipts for the same in manner authorized by this act: provided nevertheless, that no such institution to be hereafter formed shall have the benefits of this act, unless the formation of the same shall have been approved of by the justices of the county, riding, division, or place where such institution is intended to be held, at the general quarter-sessions, and by the commissioners for the reduction of the national debt, or, on their behalf, by the Comptroller-General, or assistant Comptroller, acting under the said commissioners.

3. Rules to be entered in a book, open at all seasonable times for the inspection of the persons making deposits; and rules and regulations shall be transcribed on parchment, and deposited with the clerk of the peace.

4. Before a transcript of the rules and regulations is deposited with the clerk of the peace, it shall be submitted, by the managers of the institution, to a barrister at law, for the purpose of ascertaining whether such rules are in conformity to law and with the provisions of this act; and the barrister is to give a certificate thereof, or point out in what part they are repugnant thereto. The fee to be paid the barrister must not, at one time, exceed one guinea; and the transcript is to be signed by two trustees, and, together with the barrister's certificate, be laid before the justices at the quarter sessions. The justices may reject or confirm the whole or part of such transcript; but if they reject one or more of the rules, the word "rejected" or "disapproved" must be written opposite to the rejected rule, and signed by the chairman. Within ten days after the rejection or disapproval, the clerk of the peace is to give notice of the same to the trustees who signed the transcript. No alteration in the hours of attendance is to be laid before a barrister, previously to its enrolment.

6. No treasurer, trustee, or manager, shall derive any benefit from any such Savings Bank.

7. Security to be given by treasurer, actuary, or cashier.

8. Effects to be vested in trustees.

9. No trustee or manager shall be personally liable, except for his own acts and deeds, nor for anything done, except in cases where he shall be guilty of wilful neglect or default.

10. Accounts to be given in when required by treasurer.

11. The trustees of any such Savings Bank shall invest all money received on account of such Savings Bank in the Banks of England or Ireland, and not in any other security.

15. All monies paid into the Banks of England or Ireland on the account of Savings Banks shall be invested in Bank annuities or Exchequer Bills.

16. On the 20th November, 1828, the interest payable on the receipts issued to the trustees of Savings Banks by the commissioners for the reduction of the national debt shall cease; and from and after that time, all receipts issued prior to that day shall carry interest at the rate of two-pence halfpenny *per centum per diem*; and from and after the 20th November, 1828, upon the payment of any sum of money into the Banks of England or Ireland by the trustees of any Savings Bank, it shall be lawful for the officer of the said commissioners to issue, upon every such payment, a receipt, signed by one of the cashiers of the Bank of England or Ireland respectively, for the amount of such payment, carrying interest at the rate of two-pence halfpenny *per centum per diem*.

17. The interest due on money mentioned in the receipt is to be calculated half-yearly up to the 20th November, and 20th May, and carried to account of Savings Bank as additional principal; but no interest shall be paid for any fractional part of a pound. And all interest arising to depositors may be calculated yearly, or twice a year, and carried to their credit to be added to the principal.

22. Within six weeks after the 20th November, 1828, the trustees and managers of the different Savings Banks already established in England and Ireland shall ascertain the amount of the increased stocks or funds of their respective banks up to the said day, and shall, as soon afterwards as can conveniently be, appropriate the same in the manner provided for by their respective rules and regulations made before the passing of this act; or in the event of no provision having been made by such rules and regulations, then in such manner as the trustees or managers, or the major part of them, assembled at any general meeting, shall think fit and proper.

23. In all cases where the joint stock or property of any Savings Bank shall, from the 20th November, 1828, be increased by the interest received beyond the rate of interest payable to the depositors, the said trustees or managers shall, within six months after the 20th of November in each year, ascertain, certify, and pay over to the said commissioners the amount of such increased stock and property, reserving such portion as may appear necessary to meet current expences.

24. From and after the 20th November, 1828, the interest payable to depositors shall not exceed the rate of two-pence farthing *per centum per diem*.

25. In case the trustees or managers shall receive any deposit for the benefit of any person under the age of twenty-one years, it shall be lawful to pay such person his or her share and interest in the funds of such institution.

26. And whereas deposits may have been made by married women, without notice that they are married women, and deposits may have been made by women who may have afterwards married; it is further enacted, that it shall be lawful for the trustees to pay any sum of money in respect of any such deposit to any such woman, unless the husband of such woman, or his representatives, shall give to such trustees notice of such marriage and shall require payment to be made to him or them.

27. It shall be lawful for the trustees or treasurers of any charitable or provident institution or society in England or Ireland, or charitable donation or bequest, for the maintenance, education, or benefit of the poor, to subscribe any part of the funds of such institution or society into the funds of any Savings Bank, to the amount of one hundred pounds *per annum*, provided the amount shall not at any time exceed three hundred pounds in the whole, exclusive of interest.

28. It shall be lawful for any friendly society to subscribe the whole or any part of the funds of such friendly society into the funds of any institution which shall take the benefit of this act, and which shall be willing to receive the same: provided, that it shall not be lawful for the said trustees to receive any sum from any friendly society which may exceed the sum of three hundred pounds, principal and interest included, nor to pay any interest on the same whenever such sum shall amount to the said sum of three hundred pounds or upwards.

29. The receipt of the treasurer, &c. of such friendly society, or charitable institution shall be deemed a sufficient discharge.

30. No person who is a member of any friendly society, or a member of any of the charitable institutions hereinbefore mentioned, shall, by reason of such person being a depositor in any institution taking the benefit of this act, be considered as subject to any penalty, forfeiture, or disability declared or expressed, or intended so to be, by or in the rules, orders, or regulations of such friendly society.

31. All regulations and provisions in this act, relative to money paid into the Bank of England, and receipts issued on account thereof, and also to the application of all such money by the said commissioners, shall be applicable to payments made and receipts issued under the authority of the 59th Geo. III. c. 128, entitled *An Act for the further protection and encouragement of Friendly Societies, and for preventing frauds and abuses therein*, except with respect to all such friendly societies as may have been formed and enrolled previous to the passing of this act.

32. No sum shall be paid or subscribed into any Savings Bank by any person without disclosing his name, together with his profession, business, occupation, calling, and residence.

33. It shall be lawful for the trustees or managers to receive from any person acting as trustee on behalf of any depositor, whether such person is himself a depositor or not, any sum not exceeding the annual amount hereinafter mentioned.

34. It shall not be lawful for any person who shall have made any deposit in, or any subscription to, or who shall be entitled to any benefit from, the funds of any Savings Bank, to make any deposit into the funds of any other Savings Bank.

35. It shall not be lawful for the trustees to receive from any one present or future depositor, any sum exceeding thirty pounds in the whole, exclusive of compound interest, in any one year, ending on the 20th November, nor to receive from any depositor any sum whatever which shall make the sum to which such depositor shall be entitled exceed the sum of one hundred and fifty pounds in the whole: provided, that whenever the sum standing in the name of any depositor shall amount in the whole to two hundred pounds, principal and interest included, that thenceforth no interest shall be payable on any such deposit so long as it shall continue to amount to the said sum of two hundred pounds.

36. Nothing in this act shall prevent the trustees from paying interest to any depositor whose deposit shall, on the day of the passing of this act, amount to or exceed the sum of two hundred pounds.

37. The trustees shall not receive from any such depositor any fresh or additional deposit, so long as the sum to which such depositor shall be entitled shall amount to or exceed the sum of one hundred and fifty pounds.

38. It shall be lawful for any depositor, after having withdrawn any sum of money from any Savings Bank, to re-deposit in any such Savings Bank, at any time within one year, reckoning from the 20th November, any sum of money, provided such sum re-deposited, and any previous deposit which shall have been made by such depositor in the course of the year, taken together, shall not exceed at any time in such year the sum of thirty pounds additional principal money bearing interest.

39. It shall be lawful for any depositor to withdraw from such Savings Bank the whole of his or her deposits, and interest thereon, at any one time (but not in parts or shares), for the purpose of investing the same in any other Savings Bank.

40, 41, 42, 43. Make provision for payment of deposits to executors, administrators, &c. in case of death of depositor.

#### ECCLESIASTICAL PREFERMENTS.

[9 Geo. IV. cap 94.—Passed 28th July, 1823.]

An act for rendering valid bonds, covenants, and other assurances for the resignation of ecclesiastical preferments in certain specified cases.

## XXXVI. PRIVATE BILLS OF THE SESSION OF PARLIAMENT, 1828.

THE "List of Petitions and Private Bills in Parliament" is one of the most interesting of the many important documents which mark the course of legislative inquiries and proceedings. This return is merely an alphabetical enumeration of the measures for public improvements which have been submitted for parliamentary sanction; but, when analyzed with sufficient attention, and compared with the same list for former years, it opens many striking views of our national condition.

### I.—NUMERICAL ABSTRACT OF THE LIST OF PETITIONS AND PRIVATE BILLS FOR THE SESSION OF 1828 :—

Petitions presented . . . . .	244
Bills read first time . . . . .	212
Bills read second time . . . . .	195
Bills read third time . . . . .	185
Bills which received the royal assent . . . . .	182

### II.—COMPARATIVE CLASSIFICATION OF PRIVATE BILLS FOR FOUR YEARS.

BILLS PASSED.	1825.	1826.	1827.	1828.
Agriculture.....	28	24	26	19
Companies.....	11	6	5	2
Improvement of Towns and Districts...	73	47	39	39
Internal Communication.....	108	83	63	83
Navigation.....	15	4	7	6
Private Regulation.....	51	42	45	33
Total.....	286	206	185	182

### III.—ABSTRACT OF PETITIONS AND PRIVATE BILLS IN PARLIAMENT, SESSION 1828.

CLASS.	Petitions.	Passed.	Not Passed.
I.—AGRICULTURE.			
1. Inclosures.....	24	17	7
2. Draining.....	2	2	—
3. Tithes.....	1	—	1
II.—COMPANIES.			
1. Banking, &c.....	1	—	1
2. Gas.....	3	—	3
3. Mining.....	1	—	1
4. Navigation and Fisheries.....	3	1	2
5. Miscellaneous.....	1	1	—
Carried forward .	36	21	15

CLASS.	Petitions.	Passed.	Not Passed.
Brought forward . .	36	21	15
III.—IMPROVEMENT OF TOWNS AND DISTRICTS.			
1. Building Improvements.....	14	9	5
2. Churches, Chapels, Markets, Bridges, Gaols, &c.....	18	13	5
3. Local Water-Works.....	4	2	2
4. Local Gas-Works.....	3	2	1
5. Local Paving and Sewers.....	2	1	1
6. Municipal Regulations.....	27	12	15
IV.—INTERNAL COMMUNICATION.			
1. Roads.....	71	65	6
2. Canals.....	6	3	3
3. Improvement of Rivers.....	6	4	2
4. Railways.....	13	11	2
V.—NAVIGATION.			
1. Harbours.....	6	2	4
2. Docks.....	3	3	—
3. Piers, &c.....	2	1	1
VI.—PRIVATE REGULATION.			
Estates, Divorces, &c.....	33	33	—
Total.....	244	182	62

I.—The seventeen *Inclosure* bills which have been enacted during the late session, are divided amongst the counties of Berks, Cambridge, Derby, Devon, Dorset, Lancaster, Norfolk, Radnor, Somerset, Stafford, Sussex, Wilts, and York. The two drainage bills are confined to the county of Cambridge. York has four inclosure bills, and Devon two, but each of the other counties only one. In England the progress of inclosures necessarily diminishes every year; from the large extent to which the system has been carried during the last quarter of a century, leaving, comparatively, very little waste uninclosed that will, at the present price of corn, give a return for the capital so applied. The disfranchisement of Cranborn Chase is amongst the most remarkable measures of this nature, during the late session. It has been stated, in the Report of the Emigration Committee, that England, with a surface of 32 millions of acres, has only  $3\frac{1}{2}$  millions of uncultivated wastes capable of improvement; whilst Scotland has 6 million acres of good waste land uncultivated out of nineteen millions; and Ireland 5 millions out of the same aggregate number.

II.—Not a single new *Company*, with general powers, has been created during the late session. The Canada Company Bill was for an extension of powers to the association which has been formed for the cultivation of waste lands in Canada, and for the encouragement of settlers, by fitting the land for the immediate occupation of those who choose to go out to the colony. Companies upon the same principle have been established in New South Wales, and in Van Diemen's land; the lands are granted

to the companies by Government, at a certain price, the purchase money for which is paid as they are progressively settled. One-third of the money received from the companies, by Government, is expended in making roads, in building bridges, and in other necessary works of public convenience.

In the year 1825, there were nine applications to Parliament for new Gas Companies, with general powers, not one of which passed into a law. In the session of 1828 two petitions of the same character have been rejected. The following statement with regard to the supply of gas to the metropolis and neighbourhood, is from Mr. Williams's late work on "Sub-ways:"—

"There are now in London four great Gas Light Companies—the Chartered, the City of London, the Imperial, and the Phoenix; having altogether 47 gasometers at work, capable of containing in the whole, 917,940 cubic feet of gas, supplied by 1315 retorts; and these consuming 33,000 chaldrons of coals in a year, and producing 41,000 chaldrons of coke; the whole quantity of gas generated annually, being upwards of 397,000,000 of cubic feet, by which 61,203 private, and 7258 public or street lamps are lighted in the metropolis. Besides these, there are several other minor companies and public establishments that light with gas."

III.—The building *Improvements* in the metropolis, and in the principal towns throughout the country, are amongst the most characteristic evidences of the active and enterprising spirit of our generation—and, what is of far more importance, of the habits of cleanliness, the desire for comfort, the abhorrence of close and crowded streets, which distinguish us from our forefathers. The narrow streets of all ancient towns of England were constructed principally with regard to the facilities which this crowded arrangement offered for defence, in a period when property was either exposed to the depredations of border foes, or when it was necessary for almost every town to take a part in the horrible civil contests that prevailed for two centuries amongst us. What was at first necessity, in progress of time became choice;—and thus London, after the fire, was restored upon the old inconvenient and unhealthy principle. But our habits, in this respect, are becoming much more rational.

A bill has passed during the late session, for the general improvement of the important town of Birmingham. The alterations which have already taken place there, during the last seven years, are very striking. The other bills for general improvement passed during the late session into laws, are for the towns of Cliffe, Hanley and Shelton, Hertford, Lincoln, North Shields, and Stalybridge. New Markets are in progress for Ashton-under-Line, Bristol, Gosport, and Swansea. In this department the country has made rapid advances during the last seven years.

IV.—The improvement of Great Britain, in her *Internal Communications*, is, perhaps, the most extraordinary circumstance in the records of civilization. The turnpike roads of England alone extend twenty thousand miles, and upwards of a million sterling is annually bestowed upon their repair and maintenance. The

rapidity, the precision, and the security with which the whole communication of the kingdom is thus carried on, is one of the principal causes of our astonishing commercial activity. In the late Session, sixty-five new road-bills have passed into law; in the Session of 1827, there were fifty-three. We thus see that this extraordinary course of improvement never stops—and the cause is this, the *people* know their own wants, and have the power to supply them. “In France,” says M. Dupin, “during a period of profound peace, the government does not grant, for the support of the roads, one-third of the amount which is supplied by the public of England alone, of which the superficies does not equal one-third of France.” And this neglect arises from the government there meddling with every thing. It is true that, in our own country, the government *occasionally* undertakes a magnificent work, which the local districts are unable to execute, and which is eventually the primary cause by which fertility and industry take the place of barrenness and sloth. A work of this nature, which is diffusing blessings on every side, is described in a Special Report of the late Session—we allude to the Highland Roads.

It is about seventy years since the first navigable Canal was commenced in England. At the present time there are nearly eighty canal companies in operation, who have expended thirty millions in their undertakings, and make a yearly dividend of 800,000*l.* upon their capital. The canal bills which have passed during the session of 1828, are the Tralee and the Ulster, both in Ireland; and the Welland, in Canada. The two Irish canals are not newly established; these bills are for improvement. The bills for the improvement of navigable rivers also passed, are the Aire and Calder, the Louth Navigation, and the Portsmouth and Arundel Navigation. It appears from the twenty-fourth Caledonian Canal Report, that the total expenditure upon that magnificent, but unprofitable work, has been nine hundred and seventy-seven thousand pounds. The produce of the tonnage rate is insufficient to pay the annual expenses. The depth of water in this canal, which may be relied upon for the passage of vessels, is fifteen feet. It is proposed to increase the depth to twenty feet throughout, at an estimated expense of 41,000*l.*

The extension of the system of Railways is probably a principal cause that not a single canal bill for England passed through parliament during the late session. The bills for railways are, the Avon and Gloucestershire, the Bolton and Leigh, the Bridgend, the Bristol and Gloucestershire, the Canterbury and Whitstable, the Clarence (Durham), the Commercial Road, the Liverpool and Manchester, the Llanelly, the Nantille, and the Stockton and Darlington. Each of these undertakings promises the most satisfactory results to the proprietors and to the country. The Liverpool and Manchester Railway is the most extensive work of this nature ever executed. A particular description of its progress will be found in another part of this work.

V. The last public division of this subject is that relating to the *External Navigation* of the country. The two bills for the



improvement of harbours are those of Dover and Helmsdale, placed at the Southern and Northern extremities of the island. Those for the extension or regulation of docks are the East India, the Liverpool, and the London. The other bill, in this class, is for the improvement of the Gravesend pier.

VI.—The bills of *Private Regulation* affect only individual interests, and it is, therefore, unnecessary to offer any remark upon them.

Subtracting, from the whole number of private bills, those which are of the sixth class, we find that one hundred and forty-nine projects, materially affecting the agricultural and commercial interests of the empire, and the comforts and accommodations of its inhabitants, have passed into law. These projects have originated and been carried forward—will be executed and maintained—by the energy, the wealth, the public spirit, and the vigilance of individuals. They are, each and all, remarkable instances of the power of Association in a free and intelligent community.

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The mode in which Private Bills are passed through Parliament has been described by M. Dupin, in his work on “The Commercial Power of England.” An extract may be interesting to shew the general system of vigilance which is exercised in these matters:—

The draft of a Bill having been prepared by the parties with whom the project originates, a petition is addressed to the House of Commons praying for its reception; which is not granted until the house has satisfied itself, by means of a special committee, that the petitioners have in all respects observed the forms prescribed in its standing orders. These forms being fulfilled, the bill is received, and read for the first time. A certain number of days must elapse before the second reading of the bill, on which occasion every objection that can possibly be raised against it is set forth. The bill is frequently rejected on this first debate; but if not it is referred to a special committee appointed to examine it clause by clause. Before this committee proceeds to the critical examination with which it is intrusted, a copy of the bill is sent to each county in which the line of works is included, and deposited in the office of the justice of the peace belonging to each of the parishes included in the plan, where it is open to the inspection of any person desirous of seeing it.

Meanwhile, the committee of the House of Commons meets to discuss the bill. The objections raised against it are sometimes of so serious a character that it is found necessary to reject it. If, on the contrary, the bill be approved, the committee makes its report to the House of Commons. After the lapse of a few days, the house proceeds to the third reading of the bill; it is again discussed, and if it obtain the majority of votes it is passed. It is then carried to the House of Lords, where it goes through the same formalities of previous examinations, readings, and debates. At each step of its advancement, it is liable to a final rejection. At length, if the peers approve it, and it receive the royal sanction, it becomes an act; it is a part of the law of the land.

The difficulties and objections which may be raised against every act introduced in this way, are so varied and so numerous, that it is not easy to give a distinct and complete idea of them.

# XXXVII. ABSTRACTS OF PARLIAMENTARY DOCUMENTS.

\* \* In some of the following Abstracts, the fractions of pounds are omitted, which will produce a slight apparent error in the totals.

## 1.—Finance.

AN ACCOUNT of the ORDINARY REVENUES, and EXTRAORDINARY RESOURCES, constituting the Public Income of the UNITED KINGDOM of GREAT BRITAIN and IRELAND,

For the Year ended 5th January, 1828.

HEADS OF REVENUE.	Total Income including Balances.	Total Payments out of the Income in its progress to the Exch.	Payments into the Exchequer.
<b>ORDINARY REVENUES.</b>	<b>£</b>	<b>£</b>	<b>£</b>
Customs . . . . .	20,519,778	2,225,620	17,894,405
Excise . . . . .	20,995,324	1,513,780	18,438,707
Stamps . . . . .	7,298,894	191,557	6,811,226
Taxes, under the management of the Commissioners of Taxes . . . . .	5,186,874	315,850	4,768,273
Post Office . . . . .	2,384,138	742,404	1,463,000
One Shilling in the Pound, and Sixpence in the Pound, on Pensions and Salaries, and Four Shillings in the Pound on Pensions . . . . .	66,960	1,447	62,409
Hackney Coaches, and Hawkers and Pedlars . . . . .	72,631	9,765	62,639
Crown Lands . . . . .	341,803	264,846	
Small branches of the King's hereditary Revenue . . . . .	12,973	3,214	4,973
Surplus Fees of regulated Public Offices . . . . .	65,995		65,995
Poundage Fees, Pells Fees, Casualties, Treasury Fees, and Hospital Fees . . . . .	9,896		9,896
<b>Totals of Ordinary Revenues . . . . .</b>	<b>56,955,271</b>	<b>5,263,486</b>	<b>49,581,576</b>
* * The gross Receipt has been collected at an Average of £6 15 9½ per £100.			
<b>OTHER RESOURCES.</b>			
Money received from the East India Company, on account of retired Pay, Pensions, &c. of His Majesty's Forces, arriving in the East Indies, per Act 4 Geo. IV. c. 71 . . . . .	60,000		60,000
From the Commissioners for the Issue of Exchequer Bills, per Act 57 Geo. III. c. 34, for the employment of the Poor . . . . .	272,877		272,877
Money received from the Trustees of Naval and Military Pensions . . . . .	4,245,000		4,245,000
On account of advances made by the Treasury, for improving Post Roads, for building Gaols, for the Police, for Public Works, employment of the Poor, &c., &c. . . . .	172,983		172,983
Imprest Monies, repaid by sundry Public Accountants, and other Monies paid to the Public Money brought from the Civil List, on account of the Clerk of the Hanaper . . . . .	378,788		378,788
Repayment on Account of Money advanced out of the Consolidated Fund, in the Year 1825, for silver coinage . . . . .	2,500		2,500
From the Bank of England, on account of Unclaimed Dividends . . . . .	199,634		199,634
	19,158		19,158
	<b>62,306,214</b>	<b>5,268,486</b>	<b>54,932,518</b>

AN ACCOUNT of the NET PUBLIC EXPENDITURE of the UNITED KINGDOM.

EXPENDITURE.	NET EXPENDITURE.			
	£.	s.	d.	£. s. d.
Dividends, Interest, and Management of the Public Funded Debt, (exclusive of 5,704,706 <i>l.</i> 13 <i>s.</i> 10 <i>d.</i> issued to the Commissioners for the Reduction of the National Debt,) 4 Quarters, to Oct. 10, 1827	27,366,601	7	0	28,239,847 19 3
Interest on Exchequer Bills	873,246	12	3	
Trustees for Nav. and Mil. Pension Money, per Act 3 Geo. IV., c. 51	2,214,260	0	0	2,800,000 0 0
Ditto Bank of England ditto, 4 Geo. IV., c. 22	585,740	0	0	
Civil List, 4 Quars., to Jan. 5, 1828	1,057,000	0	0	2,472,418 7 9
Pensions, ditto, to Oct. 10, 1827	365,908	15	1½	
Salaries and Allowances, ditto	180,896	1	5½	
Courts of Justice, ditto	143,047	8	7½	
Mint, ditto	14,750	0	0	
Bounties, ditto	2,956	13	8	
Miscellaneous ditto	245,459	9	11	
Ditto Ireland, ditto	303,199	19	0	
For the purchase of the Duke of Athol's Interest in the Public Revenues of the Isle of Man	134,200			
Advanced towards rebuild. London Bridge, per Act 7 Geo. IV., c. 40.	120,000			
	254,200	0	0	19,069,060 11 7½
Army	7,876,682	8	2½	
Navy	6,414,727	4	0	
Ordnance	1,914,403	0	0	
Miscellaneous	2,863,247	19	5	
Lottery Prizes	193,044	0	0	229,311 1 3
Bank of England for Discounting and Management in the Funding of 8,000,000 <i>l.</i> Exchequer Bills	36,267	1	3	
By the Commis. for issuing Excheq. Bills, per Act 3 Geo. IV., c. 86, for the Employment of the Poor	551,900	0	0	989,653 19 9
Advances out of the Consolidated Fund in Ireland, for Public Works	437,753	19	9	
				53,800,291 19 7½
Surplus of Income over Expenditure				1,132,226 14 2½
				54,932,518 13 10

ABSTRACT of the NET PRODUCE of the REVENUE of GREAT BRITAIN, in the Years ended on the 10th of Oct. 1827, and the 10th of Oct. 1828.

	1827.	1828.	Increase.	Decrease.
Customs	£16,403,142	£16,358,170		£44,972
Excise	17,210,548	17,905,978	£695,430	—
Stamps	6,349,576	6,575,318	225,742	—
Post-Office	1,436,000	1,387,000		49,000
Taxes	4,756,786	4,836,464	79,678	—
Miscellaneous	676,629	556,171		120,458
	46,832,631	47,619,101	1,000,850	214,430
Deduct Decrease			214,430	
Increase on the Year			786,420	

AN ACCOUNT of the TOTAL AMOUNT of the UNREDEEMED FUNDED DEBT, and of the Charge thereof, on the 5th Jan. 1827; of the Debt and Charge thereof created in the Year ended 5th Jan. 1828;—of the Debt and Charge thereof reduced in the course of that Year.

Total Debt on 5th Jan. 1827.				Debt.	Charge.
Great Britain	.	.	.	752,110,232	28,994,557
Ireland	.	.	.	31,691,506	1,177,255
				<u>783,801,739</u>	<u>30,171,812</u>

Debt created in the Year 1827.					
Great Britain	.	.	.	1,204,400	39,942
Ireland	.	.	.	524,186	18,282
				<u>1,728,586</u>	<u>58,225</u>
Total	.	.	.	<u>£785,530,326</u>	<u>30,230,037</u>

Debt reduced in the year 1827.				Debt.	Charge.
Great Britain	.	.	.	£6,628,266	204,111
Ireland	.	.	.	1,425,168	47,633
				<u>8,053,434</u>	<u>251,745</u>

Total Debt, 5th Jan. 1828.					
Great Britain	.	.	.	746,686,366	28,830,387
Ireland	.	.	.	30,790,525	1,147,904
				<u>777,476,892</u>	<u>29,978,292</u>
Total	.	.	.	<u>£785,530,326</u>	<u>30,230,037</u>

Note.—Besides the reduction of the Funded Debt in 1827, as above stated, there was paid within the same year, out of the Sinking Fund, to the Banks of England and Ireland, per 5 Geo. IV. c. 45, towards the discharge of the Exchequer Bills placed in their hands, for the Sums advanced by them to pay off the Proprietors of £4 per Cents. who did not assent to receive 3½ per Cents. in lieu thereof:—

Principal	.	.	.	.	.	£383,800
Interest	.	.	.	.	.	2,759
						<u>£386,559</u>

#### SUMS PAID for INTEREST on EXCHEQUER BILLS.

	Payments for one Year, to 5th Jan. 1828.			Estimated Charge upon Consolidated Fund for one year, to 5th Jan. 1828.		
	£.	s.	d.	£.	s.	d.
Interest upon Exchequer Bills issued upon the credit of Consolidated Fund	71,060	7	4	72,510	2	1
Interest on Exchequer Bills issued upon the credit of Duties on Sugar, &c.	29,369	15	11	"	"	"
Interest on Exchequer Bills issued upon the credit of the Aids, 1827.	772,816	9	0	"	"	"
	<u>873,246</u>	<u>12</u>	<u>3</u>	<u>72,510</u>	<u>2</u>	<u>1</u>

NET PRODUCE of CUSTOMS in GREAT BRITAIN.

	List of Articles.	Net Produce.
Duties inwards	.	£16,914,657 19 11½
— Outwards	.	118,085 17 5½
— Coastways	.	822,305 5 2
		<hr/> 17,855,049 2 6½
Canal and Dock Duty	.	46,931 10 3
Duties collected at the Isle of Man	.	18,337 15 1¾
Remittances from the Plantations	.	13,365 14 5
Proceeds of Goods sold for the Duties	.	974 1 2¾
Rent of Legal Quays, Warehouse Rent, Wharfage, &c.	.	17,989 14 8½
Interest on Money advanced to the Corporation of Liverpool, for building Tobacco Warehouses	.	467 12 5
Principal Money repaid by them, in part of the said Loan	.	4,532 8 2
Repayment, by Treasury order, of duty charged on lead, the produce of the Mines of Scotland	.	" " "
Surplus Receipt, on account of Fines and Seizures, independently of Legal Expenses	.	5,338 7 7½
Proceeds of Surcharges, Sale of Old Stores, &c.	.	5,788 6 9½
	Total	<hr/> 17,968,774 13 3½
Total of Produce of CUSTOMS in IRELAND	.	<hr/> 1,976,498 7 2½

NET PRODUCE of the EXCISE in GREAT BRITAIN.

	Articles.	Net Produce.
Auctions	.	£265,944 15 9¾
Beer	.	3,204,389 12 11¾
Bricks and Tiles	.	368,538 14 4¾
Candles	.	485,349 17 11¾
Cyder and Perry	.	26,837 16 5
Glass	.	598,033 11 1½
Hides and Skins	.	342,792 12 4¾
Hops	.	441,463 2 0
Licences	.	673,096 11 8½
Malt	.	3,109,807 12 5¾
Paper	.	622,559 8 2
Printed Goods	.	662,141 16 1¾
Soap	.	1,199,409 18 0¾
Spirits, British	.	2,834,742 8 6½
Starch	.	84,897 4 6
Stone Bottles	.	3,362 0 3
Sweets and Mead	.	3,472 15 10½
Tea	.	3,263,202 5 7¾
Vinegar	.	24,170 5 2¾
Wire	.	" " "
	Consolidated Duties	<hr/> 18,214,212 9 6¾
Payments on Articles on which there has not been any Receipt, viz.—		
Wine	} Deduct	
Wire (above the Receipt)		83 18 10¾
		<hr/> 18,214,128 10 8
Fines and Forfeitures	.	24,882 3 7½
	Total	<hr/> 18,239,010 14 3½
Total EXCISE in IRELAND	.	<hr/> 1,754,215 13 6¾

## NET PRODUCE of STAMPS in GREAT BRITAIN.

	£.	s.	d.
Deeds, Law Proceedings, and other written instruments, (except as under)	1,901,892	1	0 $\frac{3}{4}$
Legacies	1,030,341	10	2.
Probates, Administrations, and Testamentary Inventories	809,202	0	6.
Bills of Exchange and Promissory Notes	578,654	4	5
Receipts	202,804	5	0
Newspapers & Supplements, & Papers for Advertisements	371,038	1	11
Almanacs	28,852	5	3
Medicine, and Medicine Licences	39,116	10	3 $\frac{1}{2}$
Fire Insurances	683,940	13	6
Cards	20,563	2	6
Gold and Silver Plate, and Licences	97,125	7	10 $\frac{1}{2}$
Dice 1,020 0 0; Pamphlets 1,634 2 3	2,654	2	3
Advertisements	152,352	8	11
Stage Coaches	394,469	18	11 $\frac{3}{4}$
Post Horses	225,864	5	0
Race Horses	1,481	18	11 $\frac{1}{2}$
Penalties in Law Proceedings, and costs received	9,396	0	7
Total	6,549,748	17	2
Total of STAMPS IN IRELAND	470,757	6	10 $\frac{1}{4}$

## NET PRODUCE of the TAXES in GREAT BRITAIN.

Land Tax, on Lands and Tenements	£1,188,428	9	9
Windows	1,151,073	17	5 $\frac{1}{2}$
Inhabited Houses	1,266,529	9	9 $\frac{1}{4}$
Servants	272,234	3	11
Carriages	331,891	2	11
Horses for Riding	341,832	5	7
Other Horses and Mules	59,997	5	3
Dogs	183,161	1	0 $\frac{1}{2}$
Horse Dealers 16,676 5 0; Hair Powder 21,129 2 6	37,805	7	6
Armorial Bearings	50,292	10	0
Game Duties	159,372	18	8
Composition Duty	31,442	18	8
Penalties on arrears, levied by Barons of Exchequer, Scot.	681	15	4
	5,074,743	5	10 $\frac{1}{4}$
Property Duty	8,971	5	2
Total	5,083,714	11	0 $\frac{1}{4}$
Total of TAXES IN IRELAND	2,226	2	7 $\frac{1}{2}$

## NET PRODUCE of POST OFFICE, GREAT BRITAIN.

	Net Produce.	£.	s.	d.
Unpaid Letters outwards, and Paid Letters inwards, and Ship Letters, &c. charged on Country Postmasters.	1,630,891	9	7	
Unpaid Letters inwards, and Paid Letters outwards	122,811	4	0 $\frac{1}{2}$	
Twopenny and Penny Post Letters	26,767	8	4	
British Postage, &c. collected in Ireland	42,974	17	1	
Letters charged on the Postmasters in the Colonies	118,746	9	11	
Foreign Letters	46,095	8	7 $\frac{1}{2}$	
Passage Money, and Freight of Specie, by the Packets	4,162	9	5 $\frac{1}{2}$	
Miscellaneous	1,992,449	7	0 $\frac{1}{4}$	
Total	197,907	16	9 $\frac{1}{2}$	
Total of POSTAGE FOR IRELAND				

2.—Currency.

**BANK OF ENGLAND.**—Average Amount of Promissory Notes and Post Bills in circulation, for the year preceding April 6, 1828,  
Weekly average . . . . . £21,549,318 10 0

**GOLD MONIES** coined from 1817 to 1827.

Denominations and Value of Gold Monies coined.

Year.	Double Sovereigns.	Sovereigns.	Half Sovereigns.	Total.
1817	. . .	3,235,239	1,040,098	4,275,337
1818	. . .	2,347,230	515,143	2,862,373
1819	. . .	3,574	. . . . .	3,574
1820	. . .	931,994	17,521	949,516
1821	. . .	9,405,114	115,644	9,520,758
1822	. . .	5,356,787	. . . . .	5,356,787
1823	30,838	616,770	112,140	759,748
1824	1,401	3,767,904	295,769	4,065,075
1825	. . .	4,200,343	380,575	4,580,919
1826	. . .	5,724,046	172,415	5,896,461
1827	. . .	2,266,629	246,007	2,512,636
	32,240	37,855,633	2,895,314	40,783,188

**SILVER COIN**, coined in each Year since the commencement of the present system of Silver Coinage.

Year.	Denomination and Value of Silver Monies coined.					
	Crowns.	Half Crowns.	Shillings.	Sixpences.	Maundy Monies.	Total Value.
	£	£	£	£	£	£
1816 . .	. .	114,048	1,306,998	384,120	85	1,805,251
1817 . .	. .	1,011,582	1,151,568	273,042	105	2,436,297
1818 . .	38,808	363,132	67,122	107,118	99	576,279
1819 . .	170,874	598,752	379,764	117,810	72	1,267,272
1820 . .	112,068	299,574	398,772	37,224	79	847,717
1821 . .	109,494	179,388	123,156	21,582	66	433,686
1822 . .	31,232	. . .	. . .	. . .	198	31,430
1823 . .	. .	250,470	34,650	. . .	151	285,271
1824 . .	. .	58,212	207,900	15,840	118	282,070
1825 . .	. .	282,348	122,958	12,078	151	417,535
1826 . .	. .	273,636	317,592	17,226	151	608,605
1827 . .	. .	. .	28,710	4,158	151	33,019
1828 . .	. .	. .	. .	. .	. .	. .
up to 14th June	. .	1,386	9,564	396	151	11,437
	462,476	3,432,528	4,148,694	990,594	1584	9,035,876

**NOTE.**—The following are the *Weights of the English Coinage* :—

	oz.	dwt.	gr.		dwt.	gr.
Sovereign.....	0	5	3.274	Sixpence.....	1	19 7-11ths
Half Sovereign.....	0	2	13.637	Shilling.....	3	15 3-11ths
Double Sovereign...0	10	6.549		Half-Crown.....	9	2 2-11ths
Five Sovereign ....	1	5	16.370	Crown.....	18	4 4-11ths

## 3.—Trade and Manufactures.

Official Value of BRITISH and IRISH PRODUCE and MANUFACTURES, *Exported* from Great Britain, distinguishing the several Countries; together with the *Imports* into Great Britain from the same Countries.

COUNTRIES.	Year ending 5th January, 1827.			
	Official Value of Imports into Great Britain from Foreign Parts.	Official Value of Exports from Great Britain.		
		British and Irish Produce and Manufactures.	Foreign and Colonial Merchandise.	Total Exports.
EUROPE:—Russia . . . . .	£2,935,945	£1,646,051	£574,827	£2,220,878
Sweden . . . . .	114,355	44,153	105,753	149,907
Norway . . . . .	63,788	63,350	35,124	98,474
Denmark . . . . .	453,225	132,413	63,999	196,413
Prussia . . . . .	1,007,051	156,286	411,415	567,701
Germany . . . . .	1,591,978	6,521,686	2,352,155	8,873,842
United Netherlands . . . . .	1,396,292	2,631,799	2,326,092	4,957,891
France . . . . .	1,225,704	426,195	656,077	1,082,272
Portugal, the Azores, and Madeira . . . . .	508,846	2,041,920	104,513	2,146,434
Spain, and the Canaries . . . . .	551,218	334,423	229,236	563,660
Gibraltar . . . . .	40,498	1,376,624	199,039	1,575,663
Italy . . . . .	625,416	3,222,275	965,039	4,187,315
Malta . . . . .	29,490	350,581	75,105	425,686
Ionian Islands . . . . .	93,402	22,451	1,979	24,430
Turkey, and the Levant . . . . .	818,516	1,104,397	67,589	1,172,436
Isles of Guernsey, Jersey, Alderney and Man . . . . .	191,236	258,588	94,648	353,236
ASIA:—East Indies and China . . . . .	11,646,967	20,333,698	8,262,596	28,596,295
New Holland & South Sea Islands . . . . .	8,002,786	4,240,424	636,700	4,877,125
AFRICA:—Cape of Good Hope . . . . .	83,552	208,297	61,232	269,529
Other parts of Africa . . . . .	151,342	171,823	22,792	194,615
AMERICA:—British Northern Colonies . . . . .	218,904	155,450	133,577	294,027
British West Indies . . . . .	974,823	1,339,343	310,975	1,650,318
Foreign West Indies . . . . .	7,782,135	3,538,651	253,756	3,792,408
United States . . . . .	602,484	867,083	63,176	930,259
Brazil . . . . .	4,984,647	5,114,608	147,583	5,262,191
Mexico . . . . .	767,918	2,556,139	37,590	2,593,730
Columbia . . . . .	101,380	610,155	53,259	668,415
Peru . . . . .	21,504	293,205	27,154	320,360
Chili . . . . .	31,839	190,505	20,361	210,867
Buenos Ayres and Monte Video . . . . .	75,377	297,884	17,935	315,820
The Whale Fisheries . . . . .	265,629	415,582	6,317	421,900
	327,656	1,489	1,489	1,489
Total . . . . .	36,038,951	40,332,854	10,066,502	50,399,356
Total of Imports & Exports from Ireland . . . . .	1,420,027	942,832	24,480	967,312

Value of the IMPORTS into, and of the EXPORTS from, the *United Kingdom* of Great Britain and Ireland, during each of the three years ending the 5th January, 1828; calculated at the Official Rates of Valuation.

Years ending 5th January.	Value of Imports into the United Kingdom, calculated at the Official Rates of Valuation.	Value of Exports from the United Kingdom, calculated at the Official Rates of Valuation.			Value of the Produce and Manufactures of the United Kingdom. Exported therefrom, according to the real or declared value thereof.
		Produce and Manufactures of the United Kingdom.	Foreign and Colonial Merchandise.	Total Exports.	
	£.	£.	£.	£.	£.
1826....	44,203,807	47,150,689	9,169,494	56,320,184	38,870,945
1827....	37,686,113	40,965,735	10,076,286	51,042,022	31,536,723
1828....	44,887,774	52,219,280	9,830,728	62,050,008	37,182,857



Quantities of the following Articles, IMPORTED in the years 1824, 1825, 1826, and 1827, and to the 5th April, 1828:

	Total of the Year 1824.	Total of the Year 1825.	Total of the Year 1826.	Total of the Year 1827.	Quarter ending 5 April, 1828.
Cochineal	lbs. 219,343	lbs. 304,858	lbs. 195,165	lbs. 319,477	lbs. 82,087
Coffee	50,674,249	52,597,518	42,017,092	47,938,047	7,108,889
Cotton Wool	149,380,122	228,005,291	177,607,401	272,448,909	52,222,172
Indigo	5,080,972	6,793,631	8,087,524	6,067,747	1,391,760
Pepper	8,818,696	5,438,428	14,091,799	9,083,604	1,958,441
Tobacco and Snuff	22,130,935	40,074,447	25,897,038	33,577,464	3,636,210
Sheep's wool	22,572,617	43,837,961	15,996,715	29,142,290	3,954,569
Raw and Waste Silk	3,135,643	3,117,241	2,487,820	3,146,926	589,138
Hemp	cwt. 571,936	cwt. 595,090	cwt. 489,329	cwt. 573,392	cwt. 27,000
Sugar	4,412,649	3,908,131	4,419,095	4,109,695	483,082
Flax	724,407	1,044,576	688,665	907,078	91,270
Tallow	680,382	1,164,036	864,962	1,247,896	11,490

The VALUE of all Goods of the Produce of the East Indies and China, together with the Mauritius, IMPORTED into Great Britain.

	1826.	1827.	1828.
Imported by the East India Comp.	5,375,492	5,076,360	6,148,077
Free Trade, inclu. Privilege Trade	5,178,925	5,612,509	4,514,661
Total	£ 10,554,417	10,688,869	10,662,738

FOREIGN WINE and SPIRITS that paid Duty in the United Kingdom, for the Quarter from 5th Jan. 1828; Rate; and total Duty received.

Wine:—	Entered for Home Consum.	Amount of Duty.			Rates of Duty per Imp. Gal.
	Imp. Galls.	£.	s.	d.	
Cape - - -	170,045	20,547	4	8	£0 2 5
French - - -	109,834	39,787	15	2	0 7 3
Other Sorts -	1,685,329	406,790	14	5	0 4 10
Total -	1,965,208	467,125	14	3	
Foreign Spirits, including over-proof:—					
Rum - - -	862,342	366,403	5	6	0 8 6
Brandy - - -	317,643	356,310	8	7	1 2 6
Geneva - - -	12,614	14,163	5	7	1 2 6
Other Sorts -	1,895	2,035	18	9	Various rates.
Total -	1,194,494	738,917	18	5	

Number of Loads of TIMBER imported into the United Kingdom, from the British Provinces in North America, and from the Baltic respectively.

Year.	From British America (exclusively in British Shipping.)		From the Baltic.		Total. Loads.
	Loads.		In British Ships. Loads.	In Foreign Ships. Loads.	
1820	307,813	...	43,453	22,388	65,841
1821	317,563	...	60,749	38,453	99,202
1822	345,741	...	76,118	61,130	137,248
1823	383,747	...	64,139	97,333	161,472
1824	415,363	...	77,189	118,711	195,900
1825	467,625	...	136,635	150,236	286,871
1826	455,800	...	90,614	65,464	156,078
1827	343,203	...	107,818	65,564	173,382

Official and Declared Value of COTTON MANUFACTURED GOODS, and COTTON TWIST and YARN, exported from Great Britain in the under-mentioned Years.

Years.	Manufactured Goods.		Twist and Yarn.	
	Official.	Declared.	Official.	Declared.
1818	£21,292,355	£16,372,211	£1,296,775	£2,395,305
1819	16,696,539	12,180,129	1,585,753	2,519,782
1820	20,509,926	13,690,115	2,022,153	2,826,642
1821	21,642,935	13,788,976	1,898,679	2,305,830
1822	24,559,272	14,521,211	2,351,771	2,697,589
1823	24,119,358	13,650,896	2,425,411	2,625,946
1824	27,171,555	15,241,118	2,984,344	3,135,396
1825	26,597,574	15,046,901	2,897,706	3,206,729
1826	21,445,742	10,522,407	3,748,526	3,491,268

Qualities and Declared Value of BRITISH WOOL and WOOLLENS exported from Great Britain, in each of the three Years ended 5th Jan. 1828.

		1826.	1827.	1828.
British Sheep's Wool . . . . . lbs.		112,424	142,980	278,552
British Manufactured Woollens and Woollen Yarn.	Cloths of all sorts . . . . . pieces	384,598½	327,968½	370,850
	Napped Coatings, Duffels, &c. . . . . "	45,268½	41,800½	51,690½
	Kerseymeres . . . . . "	126,439½	86,038½	122,048
	Baizes of all sorts . . . . . "	47,090½	36,862	47,560
	Stuffs, Woollen or Worsted . . . . . "	1,138,588½	1,125,077	1,258,533½
	Flannel . . . . . yards	2,954,547	2,419,959	2,518,012
	Blankets and Blanketting . . . . . "	2,162,638	1,082,412	1,898,879
	Carpets and Carpetting . . . . . "	888,324	903,226	1,195,894
	Woollens mixed with Cotton, &c. . . . . "	1,793,101	531,330	846,568
	Hosiery, viz. Stockings, Wool, or Worst. doz. pr.	100,887-8	69,090-11	143,443-10
	Sundries, Hosiery not otherwise described, }	.....	.....	.....
	Rugs Coverlids, Tapes, and Small Wares }	.....	.....	.....
	Woollen and Worsted Yarn . . . . . lbs.	67,517	115,400	245,628
Yarn of Wool or Worsted mixed with other }	9,444	15,602	10,031	
Materials . . . . . }				
Total declared Value . . . . . £		6,194,926	4,982,908	5,277,861

Official Values and No. of Yards of BRITISH and IRISH LINEN CLOTH exported from the United Kingdom, in the year ended 5th Jan. 1828.

	British Linen. Yds.	Irish Linen. Yds.
From England . . . . .	26,099,878	9,182,742
„ Scotland . . . . .	14,945,299	619,704
„ Ireland . . . . .	„ „ „	4,284,566
The United Kingdom . . . . .	41,045,177	14,087,012
Official Value.		
England . . . . .	£ 1,287,044 8 0	£ 459,119 16 0
Scotland . . . . .	803,267 19 6	46,385 5 8
Ireland . . . . .	„ „ „ „	263,658 0 8
The United Kingdom . . . . .	2,090,312 7 6	769,163 2 4

VALUE of all GOODS EXPORTED from Great Britain to the East Indies, China, and the Mauritius, in each of the three years ending 5th January, 1828.

	1826.	1827.	1828.
Exported by the East India Comp. . . . .	1,343,411	1,842,994	1,298,593
Free Trade includ. Privilege Trade . . . . .	2,574,660	2,625,888	3,903,006
Total . . . . .	£ 3,918,071	4,468,882	5,201,599

Number of **VESSELS** entered Inwards, and cleared Outwards, at the several Ports of the *United Kingdom*, during the three years, ending 5th January, 1828.

Years ending 5th January.	British and Irish Vessels.			Foreign Vessels.			Total.		
	Vessels	Tons	Men	Vessels	Tons	Men	Vessels	Tons.	Men
Entered Inwards.									
1826	13,503	2,143,317	123,028	6,981	959,312	52,722	20,484	3,102,629	175,750
1827	12,473	1,950,630	113,093	5,729	694,116	39,838	18,202	2,644,746	152,931
1828	13,133	2,086,898	118,680	6,046	751,864	43,536	19,179	2,838,762	162,216
Cleared Outwards.									
1826	10,843	1,793,842	109,657	6,085	906,066	47,535	16,928	2,699,908	157,192
1827	10,844	1,737,425	105,198	5,410	692,440	37,305	16,254	2,429,865	142,503
1828	11,481	1,887,632	112,335	5,714	767,821	41,598	17,195	2,655,503	153,983

Number of **VESSELS** that belonged to the Ports of the British Empire, on the 31st December, 1825, 1826, and 1827, respectively.

	On the 31st Dec. 1825.			On the 31st Dec. 1826.			On the 31st Dec. 1827.		
	Vessels	Tons	Men	Vessels	Tons	Men	Vessels	Tons	Men
U. Kingdom	20,087	2,298,836	146,703	20,469	2,382,069	149,894	19,035	2,150,605	130,494
Is. Guernsey Jersey & Man	508	28,505	3,773	499	29,392	3,665	489	30,533	3,701
Brit. Planta.	3,579	214,875	15,059	3,657	224,183	14,077	3,675	279,362	17,220
Total.	24,174	2,542,216	165,535	24,625	2,635,644	167,636	23,199	2,460,500	151,415

Tonnage and Number of Men employed in the **COASTING TRADE** of the United Kingdom, for the years ending 5th January; including the Cross Channel Trade between Great Britain and Ireland.

Years.	Inwards.			Outwards.		
	Tonnage.	Men.		Tonnage.	Men.	
1826 ..	8,408,211	493,411	..	8,269,399	484,909	..
1827 ..	8,466,255	488,038	..	8,791,062	513,959	..
1828 ..	8,329,099	504,626	..	8,777,921	513,109	..

Number of **SHIPS**, specifying their **TONNAGE**, which have entered the Port of London, in the Years 1823, 24, 25, 26, and 1827.

In the Year	Foreign Trade.				Coasters.	
	British.		Foreign.		British.	
	Vessels	Tonnage	Vessels	Tonnage	Vessels	Tonnage
1823 . . .	3,031	611,451	865	161,705	18,079	2,195,250
" 1824 . . .	3,132	607,106	1,643	264,098	18,843	2,298,982
" 1825 . . .	3,989	758,565	1,743	302,122	19,527	2,360,626
" 1826 . . .	3,495	675,026	1,586	215,254	20,439	2,441,746
" 1827 . . .	4,012	769,102	1,534	221,008	17,677	2,226,040

Number of **VESSELS** Built and Registered in the British Empire, in the Years ending 5th January, 1826, 1827, and 1828.

	In the Years ending the 5th January, 1826.		1827.		1828.	
	Vessels	Tonnage	Vessels	Tonnage	Vessels	Tonnage
United Kingdom	975	122,479	1,115	118,363	894	93,144
Isles Guernsey, Jersey, and Man	28	1,550	24	2,171	17	1,894
British Plantations	536	80,895	590	86,554	374	50,771
Total	1,539	204,924	1,719	207,088	1,285	145,809

**NOTE.**—From 1814 to 1827, 272 Steam Vessels were built and registered.

Quantity of RAW and REFINED SUGAR, exported from Great Britain, from  
5th Jan. 1827, to 5th Jan. 1828.

RAW.	Cwt.	qrs.	lbs.	Cwts.	qrs.	lbs.
Of the British Plantations . . . . .	"	"	"	40,924	1	5
" Foreign Plantations . . . . .	"	"	"	103,965	0	16
" East Indies and China . . . . .	"	"	"	64,078	2	5
" Mauritius . . . . .	"	"	"	46,480	1	13
REFINED.				255,448	1	11
Actual weight Exported . . . . .	409,060	1	9			
The same stated as Raw Sugar in the proportion of 34cwt. of Raw to 20 cwt. of Refined . . . . .	"	"	"	695,402	2	7
Total stated in Cwts. of Raw Sugar . .				950,850	3	18

Quantity of COFFEE exported from Great Britain, from 5th Jan. 1827, to  
5th Jan. 1828.

	lbs.
British Plantation . . . . .	12,442,246
Foreign Plantation . . . . .	12,378,340
East India . . . . .	4,655,104
Total . . . . .	29,475,690

Total Number of Barrels of all the different kinds of BEER brewed in Great  
Britain, in each Year from 5th Jan. 1817, to Jan. 5th, 1828.

Years ended 5th January.	Total Number of Barrels.	Total Amount of Duty.
		£. s. d.
1818 ..	6,795,074	2,755,678 12 0
1819 ...	7,432,558	3,037,196 4 0
1820 ...	7,128,351	2,906,250 6 0
1821 ...	7,147,949	2,918,957 6 0
1822 ...	7,470,702	3,071,955 8 0
1823 ...	7,838,669	3,237,857 6 0
1824 ...	7,841,104	3,270,321 14 0
1825 ...	8,176,138	3,405,988 14 0
1826 ...	8,593,737	3,584,510 5 0
1827 ...	8,694,826	3,345,372 1 11
1828 ...	8,298,057	3,200,905 11 4

Number of Gallons of SPIRITS manufactured in the United Kingdom for  
Home Consumption, with the amount of duty thereon, for the Three Years  
preceding 5th January 1828.

## ENGLAND.

Year ended	Made in England.	Imported from Scotland.	Imported from Ireland.	Total paid Duty for H. Consum.	Amount of Duty.
	Imp. Gall.	Imp. Gall.	Imp. Gall.	Imp. Gall.	£
Jan. 5, 1826 . .	1,910,822	953,292	579,439	3,443,554	2,055,027
" 5, 1827 . .	3,209,044	3,365,982	832,178	7,407,204	2,532,521
" 5, 1828 . .	3,451,620	2,548,113	671,822	6,671,562	2,335,046

## SCOTLAND.

## IRELAND.

Year ended	Home Consumption.	Amount of Duty.	Home Consumption.	Amount of Duty.
	Imp. Gall.	£	Imp. Gall.	£
Jan. 5, 1826 . .	5,981,549	717,977	9,262,743	1,111,825
" 5, 1827 . .	3,993,788	565,078	6,837,408	967,998
" 5, 1828 . .	4,752,199	673,228	8,260,919	1,170,233

\* \* Total Amount of Duty for the United Kingdom for 1827-8, £4,187,442.

CORN—Average Prices per Quarter, in England and Wales, in each Month of the Year 1827.

1827.	Wheat. Per Qr.		Barley. Per Qr.		Oats. Per Qr.		Rye. Per Qr.		Beans. Per Qr.		Peas. Per Qr.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
January ...	55	1	36	0	28	8	40	10	47	3	50	0
February ..	55	3	38	1	29	2	40	6	48	6	50	3
March.....	57	4	38	3	31	3	39	2	49	10	51	4
April.....	57	11	39	4	31	4	41	2	48	9	49	1
May .....	58	4	40	8	31	3	41	3	49	8	49	2
June .....	59	10	41	8	29	5	43	10	51	8	49	9
July .....	61	9	41	8	29	4	44	9	51	8	50	1
August ....	59	10	37	0	27	1	39	0	50	1	43	5
September	56	9	33	0	24	3	34	9	45	9	44	3
October ...	52	9	30	4	22	10	32	2	42	4	47	0
November .	52	8	31	5	22	2	34	7	43	3	45	10
December..	52	0	30	8	22	1	32	9	42	0	44	0

Quantity of Foreign WHEAT taken out of Bond, or IMPORTED, from 5th July, 1827, to 27th March, 1828.

	Qrs.	lbs.
Of Foreign Countries	514,540	3
Of the British Possessions out of Europe	49,853	2
Total	564,393	5

ANNUAL AVERAGE PRICES of WHEAT, from 1792 to 1827.

	s.	d.		s.	d.		s.	d.
1792 ...	42	11	1804 ...	60	1	1816 ...	76	2
1793 ...	48	11	1805 ...	87	10	1817 ...	94	0
1794 ...	51	8	1806 ...	79	0	1818 ...	83	5
1795 ...	74	2	1807 ...	73	3	1819 ...	72	3
1796 ...	77	2	1808 ...	79	0	1820 ...	65	10
1797 ...	53	1	1809 ...	95	7	1821 ...	54	5
1798 ...	50	3	1810 ...	106	2	1822 ...	43	3
1799 ...	67	6	1811 ...	94	6	1823 ...	57	9
1800 ...	113	7	1812 ...	125	5	1824 ...	62	0
1801 ...	118	3	1813 ...	106	6	1825 ...	66	6
1802 ...	67	5	1814 ...	72	1	1826 ...	56	11
1803 ...	56	6	1815 ...	63	8	1827 ...	56	7½

Quantity of Foreign BUTTER and CHEESE IMPORTED into the United Kingdom, in the year ended Jan. 5, 1828, and the Total Duty received on each.

	BUTTER.			CHEESE.		
	Cwt.	qrs.	lbs.	Cwt.	qrs.	lbs.
Total Quantities Imported	211,145	1	17	189,892	0	12
Rates of Duty charged	20s. per cent.			10s. 6d. per cent.		
Amount of Duty received	£ 209,430 10 11			£ 98,668 0 0		

COALS.—Consumption of Coals in London, in the following Years:—

	1802	1810	1820	1824	1827
Chaldrons	832,839	980,372	1,171,178	1,435,195	1,558,810

**HOP DUTY.**—An Account of the Duty on Hops, of the growth of the Year 1828, distinguishing the different Districts, and the Old from the New Duty, (with the Duty of 1827 added.)

Districts.	Duty, 1828.	Duty, 1827.	Districts.	Duty, 1828.	Duty, 1827.
Barnstaple ...	£37	£12	Rochester ....	103,504	80,383
Bath .....	.....	.....	Salisbury ....	4,683	4,564
Bedford .....	92	189	Salop .....	5	.....
Cambridge ..	18	23	Somerset ....	14	10
Canterbury ..	61,718	46,162	Stafford .....	.....	.....
Chester .....	2	.....	Stourbridge...	2,127	1,501
Cornwall ....	10	12	Suffolk .....	933	693
Derby .....	859	34	Surrey .....	128	110
Dorset .....	71	58	Sussex .....	75,417	71,439
Essex .....	2,073	3,139	Uxbridge ....	36	27
Exeter .....	87	16	Wales, East..	3	.....
Gloucester ...	33	2	—— Middle	330	307
Grantham ....	189	14	—— West .	2	1
Hants .....	7,455	4,889	Wellington ...	24	.....
Hereford ....	28,763	25,755	Whitby .....	.....	.....
Hertford ....	.....	.....	Worcester ...	7,230	5,226
Isle of Wight .	7	.....			
Lincoln .....	3,175	284		299,178	244,953
Marlborough .	35	22			
Northampton .	12	15	Old Duty, at }	172,027	140,848
Oxford .....	37	14	1d. $\frac{1}{2}$ per lb. }		
Plymouth ....	22	9	New Duty, at }	127,150	104,105
Reading .....	20	27	$\frac{3}{4}$ f. $\frac{8}{10}$ per lb. }		
			Tot. at 2d. per lb.	299,178	244,953

**IRON.**—(The following account is extracted from Official Documents, but not from those immediately before Parliament in the last Session.)

The whole Iron made in Great Britain was :—

In 1740.....	17,000 tons a year, from 59 furnaces.
1788 it had increased to	68,000 do..... 85 do.
1796.....do.....	125,000 do.....121 do.
1806.....do.....	250,000 do.
1820.....do.....	400,000 do.
1827.....do.....	690,000 do.....284 do.

The different counties in which it is made are as under, in 1827 :—

Staffordshire .....	216,000 tons, from 95 furnaces.
Shropshire .....	78,000 do.....31 do.
South Wales .....	272,000 do.....90 do.
North Wales .....	24,000 do.....12 do.
Yorkshire .....	43,000 do.....24 do.
Derbyshire .....	20,500 do.....14 do.
Scotland.....	26,500 do.....18 do.
	<u>690,900 tons. 284</u>

About 3-10ths of this quantity is of a quality suitable for the foundry, which is all used in Great Britain and Ireland, with the exception of a small quantity exported to France and America. The other 7-10ths is made into bars, rods, sheets, &c.

## 4. Poor Rates, &amp;c.

Amount levied by Assessment for Poor Rates and County Rates in each County of England and Wales, in the year ending March 25, 1826, distinguishing the amount levied on Land, Dwelling-houses, Mills, Factories, and Manerial Profits.

\* \* This Account was ordered by the House of Commons to be reprinted, Sess. 1828.

Counties.	Land.	Dwelling Houses.	Mills, Factories, &c.	Manerial Profits, &c.	TOTAL.
ENGLAND.	£ s.	£ s.	£ s.	£ s.	£ s.
Bedford. . . . .	77,920 1	6,298 7	567 19	183 2	84,969 9
Berks . . . . .	89,595 17	21,013 15	2,446 1	838 15	113,894 8
Buckingham . . .	123,470 0	17,495 9	2,702 7	247 17	143,915 13
Cambridge . . . .	85,612 7	14,427 0	1,049 2	143 7	101,231 16
Chester. . . . .	88,606 3	20,592 1	5,314 19	1,752 1	116,265 4
Cornwall. . . . .	85,979 8	14,016 10	1,857 13	7,408 9	109,262 0
Cumberland. . . .	40,764 14	12,378 4	713 18	1,129 9	54,986 5
Derby . . . . .	71,375 11	12,735 6	2,128 1	1,454 11	87,693 9
Devon . . . . .	180,872 18	47,898 3	3,925 5	3,396 8	236,092 14
Dorset . . . . .	74,811 8	17,169 12	750 2	914 6	93,645 8
Durham . . . . .	63,296 11	16,667 13	3,624 0	11,442 6	95,030 10
Essex . . . . .	243,111 17	42,761 5	6,828 11	1,368 17	294,070 10
Gloucester . . . .	100,117 1	49,016 12	4,961 14	1,455 16	155,551 3
Hereford . . . . .	58,623 1	6,735 16	86 0	35 4	65,480 1
Hertford . . . . .	74,926 13	23,110 8	2,775 13	512 9	101,305 3
Huntingdon. . . .	38,911 19	5,504 4	570 1	96 11	45,082 15
Kent. . . . .	253,374 14	103,583 16	11,660 3	3,327 2	371,945 15
Lancaster . . . . .	168,421 11	118,260 10	50,460 14	12,525 9	349,668 4
Leicester . . . . .	93,881 14	17,634 5	781 12	310 5	112,607 16
Lincoln . . . . .	174,765 12	23,305 13	3,897 8	836 11	202,845 4
Middlesex . . . . .	57,221 3	509,364 13	36,352 12	786 11	603,724 19
Monmouth . . . . .	25,601 19	4,205 12	790 12	1,214 6	31,872 9
Norfolk. . . . .	240,525 17	49,034 17	8,097 1	3,923 12	301,631 7
Northampton . . .	131,644 3	12,372 10	535 15	1,022 8	145,574 16
Northumberland. .	50,834 0	15,232 13	8,773 19	2,981 4	77,821 16
Nottingham. . . .	52,624 14	24,123 13	2,971 6	291 9	80,011 2
Oxford . . . . .	109,305 13	21,863 1	1,148 16	469 4	132,786 14
Rutland . . . . .	10,960 2	847 0	74 19	7 4	11,889 5
Salop . . . . .	72,763 1	14,515 8	1,227 7	2,247 4	90,753 0
Somerset . . . . .	141,247 4	30,305 15	2,380 0	3,041 13	176,974 12
Southampton . . .	165,601 12	46,174 0	3,374 10	665 13	215,815 15
Stafford . . . . .	85,669 14	34,962 18	6,654 15	7,129 4	134,416 11
Suffolk . . . . .	221,332 1	36,524 17	4,393 8	711 19	262,967 5
Surrey . . . . .	80,357 2	144,064 0	22,933 5	2,645 8	250,049 15
Sussex . . . . .	214,304 1	42,752 2	4,609 12	465 12	262,131 7
Warwick . . . . .	94,842 6	49,392 14	10,674 5	3,032 9	157,991 14
Westmoreland . . .	24,185 13	2,830 17	496 6	102 17	27,615 13
Wilts. . . . .	157,230 19	24,662 0	3,234 5	1,321 6	186,448 10
Worcester . . . . .	62,888 4	15,892 3	3,111 8	2,092 0	83,983 15
York { East Riding .	71,529 16	32,414 0	2,337 17	3,477 18	109,759 11
York { North do. . .	83,522 16	8,204 11	1,207 11	668 12	93,603 10
York { West do. . .	180,597 4	78,471 14	23,269 2	5,782 4	288,120 4
Tot. of England & Wales	£ 4,523,288 4	1,788,865 7	255,774 14	93,538 12	6,661,486 17
WALES.					
Anglesey . . . . .	15,581 18	1,490 9	268 11	1 0	17,341 18
Brecon . . . . .	17,566 14	1,533 7	138 10	150 14	19,389 5
Cardigan . . . . .	17,578 3	915 13	88 19	2 4	18,584 19
Carmarthen. . . .	31,697 13	2,872 16	428 16	277 19	35,277 4
Carnarvon . . . . .	17,860 1	3,516 9	165 19	233 16	21,776 5
Denbigh . . . . .	36,011 1	1,977 16	377 17	132 0	38,548 14
Flint . . . . .	19,447 5	1,789 19	745 10	318 17	22,301 11
Glamorgan . . . .	30,197 6	4,878 15	1,031 1	2,096 5	38,253 7
Merioneth. . . . .	16,226 3	214 4	13 18	.....	16,454 5
Montgomery . . . .	32,694 11	2,210 9	373 11	45 12	35,324 3
Pembroke. . . . .	23,226 9	3,600 2	91 17	14 17	26,933 5
Radnor . . . . .	14,106 8	362 17	15 10	.....	14,484 15
Total of Wales & England & Wales	£ 4,795,481 16	1,814,223 3	259,564 13	96,881 16	6,966,156 8

COUNTY RATES and POOR RATES.—Abstract of Returns, showing the Amount of Monies levied in England and Wales, in the Year ending March 27, 1827; distinguishing Payments made thereout for other Purposes than the Relief of the Poor, the Sums expended, &c., pursuant to Act 59 Geo. III. c. 12.

COUNTIES.	Total Sums levied.	Payments thereout for other purposes than the Relief of the Poor.	Sums expended for the Relief of the Poor.	Total Sums expended.	Select Vestries.	Assistant Overseers.	Increase Per Cent.	Diminution Per Cent.
ENGLAND.	£	£	£	£				
Bedford. . . . .	92,310	9,400	81,960	91,360	19	25	9	
Berks . . . . .	118,593	15,443	99,527	111,970	21	43	..	2
Buckingham . . . . .	153,912	19,839	132,677	152,516	58	51	5	
Cambridge . . . . .	105,712	14,857	90,007	101,864	17	37	..	
Chester . . . . .	148,493	38,371	103,753	147,124	119	95	24	
Cornwall . . . . .	120,455	16,315	99,109	115,454	45	27	7	
Cumberland . . . . .	60,501	13,367	45,719	58,885	77	62	9	
Derby . . . . .	97,532	22,950	76,569	99,518	76	81	11	
Devon . . . . .	247,641	31,319	213,539	244,887	101	100	2	
Dorset . . . . .	97,521	12,129	82,795	91,923	42	53	1	
Durham . . . . .	97,418	17,478	76,703	91,181	82	59	1	
Essex . . . . .	306,430	45,517	261,278	306,795	39	75	2	
Gloucester . . . . .	190,224	48,359	152,234	190,597	60	80	11	
Hereford . . . . .	68,732	42,010	57,423	69,433	46	50	2	
Hertford . . . . .	109,073	14,900	93,065	103,054	16	29	6	
Huntingdon . . . . .	49,519	6,149	42,127	48,277	15	16	4	
Kent . . . . .	384,121	51,121	337,833	392,254	58	146	3	
Lancaster . . . . .	545,737	191,476	347,912	539,283	213	212	47	
Leicester . . . . .	138,933	20,942	117,962	138,901	71	46	20	
Lincoln . . . . .	214,750	46,381	167,988	214,568	154	113	6	
Middlesex . . . . .	666,418	99,727	612,148	711,875	17	50	10	
Monmouth . . . . .	32,144	8,117	23,731	31,851	14	22	5	
Norfolk . . . . .	343,971	47,794	297,156	344,950	81	96	11	
Northampton . . . . .	168,038	19,176	148,176	167,352	67	52	12	
Northumberland . . . . .	78,924	9,827	69,290	79,118	54	51	3	
Nottingham . . . . .	99,086	27,750	71,936	99,685	38	51	19	
Oxford . . . . .	139,005	16,147	119,739	135,886	50	54	3	
Rutland . . . . .	14,029	4,394	9,480	13,874	32	10	11	
Salop. . . . .	96,921	15,708	80,754	96,461	50	60	5	
Somerset . . . . .	189,692	23,534	163,225	186,810	97	105	8	
Southampton . . . . .	213,406	25,598	184,929	210,527	49	5	..	5
Stafford . . . . .	165,519	33,850	124,959	158,809	61	78	15	
Suffolk . . . . .	253,476	29,247	223,037	242,284	66	107	..	4
Surrey . . . . .	283,103	50,213	241,532	291,830	13	32	12	
Sussex . . . . .	274,135	33,835	239,779	273,664	61	93	..	
Warwick . . . . .	169,537	33,844	144,582	178,425	51	62	9	
Westmoreland . . . . .	31,030	4,400	27,114	31,515	59	21	19	
Wilts . . . . .	192,915	24,600	165,443	190,043	36	57	3	
Worcester . . . . .	93,686	15,755	76,954	92,709	45	61	6	
York { East Riding . . . . .	121,474	21,282	95,629	119,911	79	26	9	
York { North do. . . . .	98,533	20,165	76,566	96,731	115	53	6	
York { West do. . . . .	391,401	90,248	298,483	288,730	146	139	31	
Tot. of England £	7,469,220	1,309,816	6,179,877	7,489,694	2619	2738	9	
WALES.								
Anglesey . . . . .	17,557	2,027	15,285	17,312	22	12	5	
Brecon . . . . .	20,613	3,749	17,019	20,768	20	10	4	
Cardigan . . . . .	10,615	3,756	15,905	19,660	17	16	2	
Carmarthen . . . . .	36,578	5,968	30,333	36,321	36	8	7	
Carnarvon . . . . .	23,391	4,016	19,331	23,347	23	14	7	
Denbigh . . . . .	39,265	7,058	32,306	39,361	19	27	6	
Flint . . . . .	22,469	3,530	19,037	22,567	13	14	4	
Glamorgan . . . . .	39,487	5,981	32,972	38,951	32	50	..	
Merioneth . . . . .	16,692	2,141	14,477	16,618	4	10	1	
Montgomery . . . . .	36,277	6,013	29,998	36,010	21	18	1	
Pembroke . . . . .	28,211	5,427	22,506	27,933	29	12	2	
Radnor . . . . .	14,986	2,894	12,021	14,915	10	5	5	
Total of Wales £	315,131	52,561	261,211	313,771	249	196	4	
Total of Eng- land & Wales } £	7,784,351	1,362,377	6,441,088	7,803,465	2868	2934	9	



## 5.—Miscellaneous.

MONEY received in the United Kingdom from the Directors of Savings Banks, including Friendly Societies, by the Commissioners for the Reduction of the National Debt, in each year since 6th August 1817.

From 6 Aug. 1817 } to 5 Jan. 1818 }	£ 328,281 15 5	Brought up £ 6,460,794 3 4
Yr. end. 5 Jan. 1819	1,567,667 7 9	1824 1,932,448 0 0
1820	1,019,612 7 9	1825 2,586,218 13 11
1821	707,106 7 9	1826 1,261,290 1 7
1822	1,205,960 4 8	1827 526,155 0 0
1823	1,632,166 0 0	1828 979,641 0 0
		£13,746,546 18 10

Return of the Amount of the SLAVE POPULATION in each of His Majesty's Colonies, distinguishing the Sexes; as received at the Office of the Registrar of Colonial Slaves, since the 9th May, 1826.

	Year.	Males.	Females.	Total.
Barbadoes . . .	1826	36,995	43,556	80,551
Bahamas . . .	1825	5,549	5,292	10,841
Berbice . . .	1825	11,423	10,041	21,464
Bermuda . . .	1827	2,208	2,400	4,608
Demerary . . .	1826	38,758	32,624	71,382
Grenada . . .	1825	12,057	12,840	24,897
Do. . . . .	1826	11,896	12,685	24,581
Jamaica . . .	1826	162,726	168,393	331,119
Nevis . . . .	1825	4,591	4,695	9,286
St. Christopher . . .	1825	9,324	10,192	19,516
St. Vincent . . .	1825	12,007	12,245	24,252
Tobago . . . .	1826	6,394	7,034	13,428
Do. . . . .	1827	6,138	6,861	12,999
Trinidad . . . .	1825	13,435	11,017	24,452
Virgin Islands . . .	1825	2,505	2,931	5,436

FIRE INSURANCE.—Amount of Duty on Fire Insurances, paid by the London Fire-Offices, for the Year 1827.

	£.	s.	d.
Sun . . . . .	111,521	10	2
Phoenix . . . . .	62,482	1	0
County . . . . .	43,522	16	11
Royal Exchange . . . . .	38,034	2	1
Protector . . . . .	37,063	12	7
Guardian . . . . .	29,063	14	11
Imperial . . . . .	28,334	2	7
Globe . . . . .	26,169	14	9
Atlas . . . . .	20,898	16	3
Alliance . . . . .	14,746	16	4
Union . . . . .	15,705	7	1
British . . . . .	15,464	3	3
Westminster . . . . .	14,359	9	7
Albion . . . . .	12,869	8	7
Hand-in-hand . . . . .	11,704	1	7
London . . . . .	7,177	4	11
Palladium . . . . .	4,721	5	9
Beacon . . . . .	726	13	1

K 5

COUNTIES and PLACES investigated by the COMMISSIONERS of  
INQUIRY into CHARITIES, 29th May, 1828.

County of Bedford *	County of Salop
" Berks	City and County of the City of
" Cumberland *	Bristol *
" Derby *	County of Somerset *
" Devon *	" Southampton *
" Essex	Isle of Wight
City and County of Gloucester	County of Stafford *
County of Gloucester	" Suffolk
" Herts	" Surrey *
" Kent	Borough of Southwark *
" Lancaster	County of Sussex
Corporation of London	" Warwick *
London:—Charities under the ma-	" Westmoreland *
agement of the Chartered Com-	City and County of the City of
panies	Worcester
County of Middlesex	County of Worcester
" Northampton	City and County of the City of York
" Nottingham	County of York—East Riding *
City of London	" York—North Riding *
" Oxford *	" York—West Riding *
" Rutland *	General Charities.

The Income of all the Charities investigated amounts to between £480,000 and £500,000 per Annum.

The Counties &c. *finished*, are marked thus (\*). The remainder are in various stages of progress.

CRIME.—NUMBER of COMMITTALS to the NEW BAILEY, SALFORD, for Felony, from the year commencing January 1809 to the end of the October Quarter, 1827.

Year.	Total.	Females.	Males.	Males, 17 Years, and under.	Females, 17 Years, and under.	Re-com- mittals.
1809	188	70	118	15	5	31
1810	171	64	107	15	4	42
1811	219	76	143	25	5	48
1812	257	96	161	26	8	39
1813	306	107	199	41	10	68
1814	327	112	215	27	17	63
1815	425	129	296	51	12	91
1816	454	110	344	64	2	84
1817	792	169	623	118	23	163
1818	746	163	583	146	12	169
1819	737	175	562	155	19	184
1820	853	161	692	225	22	232
1821	706	116	590	214	13	213
1822	725	131	594	194	26	248
1823	712	141	571	154	20	211
1824	893	185	708	188	27	262
1825	933	247	686	167	42	241
1826	937	179	758	201	29	262
1827	889	179	710	160	26	282

## XXXVIII. CHRONICLE OF THE SESSION OF PARLIAMENT,

[9 Geo. IV., 1828.]

PARLIAMENT opened by commission. His Majesty's Speech read  
*Jan.* by the Lord Chancellor. The principal points in the speech were  
 29. the following:—the continuance of the amicable relations between  
 this country and foreign states, and of the general desire for peace;  
 concern at the state of affairs in the East of Europe; the evil consequences, to neutral states, of the struggle between the Turks and Greeks;  
 anxiety to terminate the calamities incident to such hostilities; interposition, in concert with France and Russia, and at the instance of the  
 Greeks, to effect a reconciliation with the Ottoman Porte; the battle of  
 Navarino a collision wholly unexpected; regret that such a conflict  
 should have occurred with the naval force of an ancient ally; the hope  
 that the untoward event would not be followed by further hostilities, nor  
 impede the adjustment of the existing differences; objects of present  
 and future efforts, to terminate the contest between the hostile parties,  
 to settle permanently their relations to each other, and to maintain the  
 repose of Europe on the basis of the last general treaty of peace; the  
 speedy withdrawal of the British troops from Portugal—the purpose for  
 which they had been despatched having been accomplished; the conclusion  
 of treaties of amity and commerce with the Emperor of the Brazils,  
 and with the United States of Mexico; estimates for the coming year;  
 diminution in some branches of the revenue of the preceding year—the  
 amount, on the whole, satisfactory; considerable increase in the exports  
 of British manufactures; more general employment of the people; and  
 indications of the abatement of recent commercial difficulties.

(*LOARDS*). Address, in reply to the King's speech, proposed by the  
 Earl of Chichester, seconded by Viscount Strangford. Discussion on  
 the expressions used in the speech, and in the address, respecting the  
 relations of the country with Turkey, and the engagement of Navarino—  
 Lord Holland, and other peers, maintaining that the connexions between  
 Great Britain and Turkey were those of mere amity, and not to be termed  
 an alliance. The Duke of Wellington, and other ministers, disclaimed  
 all intention of throwing any imputation on Admiral Codrington by the  
 expressions made use of in the speech. The Marquess of Lansdowne, a  
 member of the ministry at the time when the engagement took place,  
 declared there was no transaction which had occurred under that  
 administration which he was more prepared to defend than the conduct  
 of Sir Edward Codrington. Viscount Goderich, at the same period  
 head of the government, declared that the Admiral had acted with sound  
 discretion, and discharged his duty with consummate skill and courage.  
 The address voted unanimously.

(*COMMONS*.) Mr. Jenkinson, in proposing the address, lamented the  
 incapacity of his brother, the Earl of Liverpool; but assured the house  
 and the country that that noble Lord approved of the ministry, as  
 recently formed. The honourable member deprecated all discussion of  
 the matters involved in the speech from the throne, in consequence of  
 the absence of so many members of the ministry—the re-elections, after  
 their acceptance of offices, not having taken place. Mr. R. Grant seconded  
 the address. Mr. Brougham protested against being supposed to concur  
 in the language of the speech or of the address, because he did not divide  
 the house; he desired to convey his dissent, in the strongest manner,  
 from the language of lamentation in which the battle of Navarino had  
 been adverted to. Mr. Brougham expressed his readiness to support the  
 ministry as long as the members who composed it showed a determination  
 to retrench the expenditure of the country, to improve its domestic

arrangements, and to adopt a truly British system of foreign policy. Lord Palmerston denied that the expressions used in the King's speech cast any reflection on Sir Edward Codrington. His Lordship also explained, that although the British ambassador had quitted Constantinople, the peace existing between Great Britain and Turkey had not been interrupted; and vindicated, generally, the course pursued by the late government with regard to the foreign relations of the country.

(COMMONS). Leave given, on the motion of Lord John Russell, *Jan.* to bring in a Bill for the Disfranchisement of the borough of Penryn. On the motion of Mr. Tennyson, leave also given to bring in a Bill for the Disfranchisement of East Retford.

(COMMONS). In committee of supply, 23,800,000*l.* voted to pay off exchequer bills of the years 1826 and 1827; and 734,200*l.* in discharge of exchequer bills advanced for public works, fisheries, and building of churches.

(COMMONS). Mr. Brougham brought forward a motion on the *Feb.* State of the Law, being for an address to his Majesty, praying him to issue a commission for inquiring into the defects occasioned by time and otherwise in the laws of the realm of England, and into the measures necessary for removing the same. Of this speech the following are the principal heads:—Development of the objects of the desired inquiry.—Review of the constitution of the British Courts of Justice, and of the inconveniences arising from the imperfections of their existing rules; remedies suggested; the creation of two additional judgeships; the classification of suits, and their appropriation to different courts; and the partition, into an equitable and legal side, of the Court of Exchequer.—The evils of the administration of justice in Wales.—Recommendation to assimilate the mode of administering the law in the principality with that pursued in England; assigning the Welsh circuit to two new Judges.—The absurdity and inconvenience of moveable terms and circuits.—The evils of the civil law courts: the bad mode of paying the judges of those tribunals by fees; the impropriety of their appointments by Church dignitaries; and the constitution of the court of delegates.—The incompetency of the privy-council to the duties assigned it as a court of the last resort in colonial matters; recommendation of jury-trial for East Indian possessions.—The defects in the system of the magistracy: the liability to abuse of the power of licensing, and of the jurisdiction in game cases; and the exemption from revision of their judgments.—Review of the state of the law: the inconvenience of anomalous laws; the injustice of the privileges assumed by the crown; the necessity of avoiding useless litigation; the abolition of needless forms of process and fictions, of fines and recoveries, of the doctrine of trusts, &c.; proposal to enlarge the law of arbitrament.—Exposition of the true principles of legal practice, the deviation from them by the English system, as instanced in the permission of arrest on mesne process, and outlawry to compel appearance.—The absurdities of the prevailing system of pleading.—The law of evidence: detail of the advantages of trial by jury; the inconsistency of the rules now followed in respect to the competency and incompetency of interested witnesses; testimony of parties; imperfection of the rules of the courts on the construction of written evidence; propriety of adopting an uniform mode of examination of witnesses throughout the different tribunals.—The law respecting limitation of time: its inconsistencies; exemption of specialty debts from the operation of the statute; the nice distinctions made in its construction; and the unreasonableness of exempting the Church from its provisions.—Proceedings at trial: injury to the administration of justice from the option exercised by defendants of keeping back witnesses; suggestion of the appointment of a sworn short-hand writer in *nisi prius* courts; the injustice in trials of real actions, *e. g.* on a writ of right, of throwing the burden of proof on the party in possession.—Execution after trial: inconveniences of the English system; imperfect recourse against the debtor's estate; exemption from seizure in favour of landed

estate, and in some cases of chattels, in others, of money and of stock; absurdity of the principle of prison rules.—Costs: unreasonableness of their amount shown by examples; their disproportion to the debt sued for; errors in rule of taxation—refusing as between party and party costs considered fair as between attorney and client.—The vagueness of the law of partnership; the susceptibility of improvement of the bankrupt laws.—Warning against the danger of partial legislation on such a subject as the law of the land. The debate was adjourned to the 21st, and afterwards to the 29th of February.

(**LOARDS**). Debate on the affairs of Greece and Turkey, on the Feb. motion of the Earl of Carnarvon *vice* Lord Holland, for copies of 11. the instructions agreed upon by the British, French, and Russian cabinets, and sent to the admirals of the combined fleets in the Mediterranean and Levant, between the 6th July and the 20th October, 1827. The motion was opposed by the Earl of Dudley, on the ground, that no vindication of the British admiral was needed, as he had meritoriously discharged his duty. Viscount Goderich took the opportunity to give an explanation of the circumstances that led to the recent ministerial changes. The Earl of Eldon denied that the objects of the protocol of St. Petersburg, and of the treaty of the 6th of July, were the same. The Duke of Wellington, in alluding to the word “guarantee,” used by the Earl of Carnarvon, declared that, in forming the new administration, he had stated it to be his intention to carry the treaty of the 6th of July into execution, but that he had given no guarantee as to the policy of that administration; and that it must be by mistake that Mr. Huskisson was reported, in his speech at Liverpool, to have said that he had received any such guarantee. On this occasion the Earl of Dudley, in answer to allusions made by the Marquess of Clanricarde, explained the views with which he had retained office.

(**COMMONS**). Debate on the motion of Mr. M. A. Taylor for Feb. 12. returns respecting the Court of Chancery. The motion was not opposed.

(**COMMONS**). Debate on the motion of Mr. Hobhouse for a vote Feb. of thanks to Sir Edward Codrington, and the officers and seamen 14. engaged in the battle of Navarino. The motion was opposed by Mr. Huskisson, on the ground that the country was not at war with the power over whose fleet the victory had been obtained. The right hon. gentleman, in the course of his speech, declared that, on inquiries made by Government, it had been clearly proved that there was nothing rash or precipitate in the conduct of the officer commanding the British fleet. Mr. Peel spoke against the motion, praising the conduct of Sir Edward Codrington, and admitting that he would have assented to the motion, had the action taken place with the forces of a power with whom we were at war. The mover withdrew his motion, satisfied with having elicited such expressions of approbation regarding the conduct of the admiral.

(**COMMONS**). The Finance Committee appointed, on the motion Feb. of Mr. Secretary Peel, “That a select committee be appointed, to 15. inquire into the state of the public income and expenditure of the United Kingdom; and to consider and report to the house what further regulations and checks it may be proper, in their opinion, to adopt for establishing an effectual control on all charges incurred in the receipt, custody, and application of the public money; and what further measures can be adopted for reducing any part of the public expenditure, without detriment to the public service.”

(**COMMONS**). Explanations of the late changes in the Ministry Feb. called for by Lord Normanby. The principal speakers on this 18. occasion were Mr. Huskisson, Mr. Herries, and Mr. Tierney. Mr. Huskisson detailed the circumstances which led to the dissolution of Lord Goderich’s administration, which, it appeared, was to be attributed to the refusal of Mr. Herries to concur in the appointment of

Lord Althorp as chairman of the finance committee. In justification of his conduct in retaining office, the right hon. gentleman gave explanations of the nature of the guarantee which he had considered he had received from the new prime minister, that the principles of the former government were not to be departed from. Mr. Herries, in following Mr. Huskisson, denied that the difference between himself and Mr. Huskisson was the cause of the dissolution of the administration—that he knew there was a design, independent of his resignation, to break up the ministry; and he disclaimed the idea of having had communication with any individual out of the cabinet.

(COMMONS). Lord John Russell's motion for a repeal of the *Feb.* Test and Corporation Acts. The motion was as follows:—"That this  
26. house will resolve itself into a committee of the whole house, to consider of so much of the said acts" (the acts of 13th and 25th Charles II., commonly called the Test and Corporation Acts) "as requires persons, before they are admitted into any office or place in corporations, or having accepted any office, civil or military, or any place of trust under the crown, to receive the sacrament of the Lord's Supper, according to the rites of the church of England." The motion was opposed by Mr. Huskisson and Mr. Peel, and Lord Palmerston, then minister at war. On the division the numbers were—Ayes 237, Noes 193: majority for the motion—44.

(COMMONS). In the committee on the repeal of the Test and Corporation Acts, Lord John Russell moved a resolution, expressing  
28. the opinion of the committee, that so much of the act of the 13th Charles II. as goes to provide for the welfare and security of corporations, and that part of the 25th Charles II. for preventing danger to the establishment of the church, together with that part of the 16th Geo. II. for amending the aforesaid acts (which calls upon all protestant dissenters to subscribe to certain formulæ, and take the sacrament of the Lord's Supper, for the purposes therein expressed), ought to be repealed. On this occasion Mr. Peel prayed for delay, on the ground of the short space of time which had elapsed since the motion was carried for going into a committee; and objected, that the tenor of the motion submitted to the committee differed from the terms of the former resolution; the one being "to *consider* of so much of the acts as requires, &c."—the other, "that so much of the said acts ought to be repealed." Lord John Russell persisted in his motion. Mr. Peel left the house, followed by the Attorney-General and other members, without voting. The question was carried in the affirmative.—Select committee appointed for inquiring into the police of the metropolis, on the motion of Mr. Secretary Peel.

(COMMONS). Debate adjourned from the 7th of Feb. on Mr. *Feb.* Brougham's motion for a commission to inquire into the State of  
29. the Laws. The Solicitor-General, Attorney-General, and Mr. Peel expressed the willingness and intention of the government, so far to concur in the motion, as to consent that separate commissions should issue—one for inquiry into the progress of suits at common law, the other into the state of the laws affecting real property. Mr. Brougham amended his motion, to meet these wishes, and in its amended shape it was put and agreed to as follows—"That an humble Address be presented to his Majesty, respectfully requesting that his Majesty may be pleased to take such measures as may seem most expedient for the purpose of causing due inquiry to be made into the origin, progress, and termination of actions in the superior courts of common law in this country, and matters connected therewith; and into the state of the law regarding the transfer of real property."

(COMMONS). Examination of witnesses in committee of the *March* House of Commons, on the East Retford Disfranchisement Bill;  
3. Mr. Robert Gordon, chairman; Jonathan Fox, a witness, on the motion of Mr. Alderman Waithman, committed to Newgate for wilfully suppressing the truth.

(COMMONS). The report of the committee on the Test and Corporation Acts, brought up, read, and agreed to. Bill presented by  
**March** 4. Lord Althorp, read a first time.—Speech of Mr. Wilmot Horton, and debate in the House of Commons, on the subject of emigration; on the motion for an address to His Majesty, for the report of Lieut.-Colonel Cockburn, on the subject of emigration, together with the instructions received from the colonial department, on the 26th January, 1827. The address was voted, and Mr. Wilmot Horton obtained leave to bring in the Passengers' act bill.

(COMMONS). Debate on the Treaty of Limerick, and the obligations imposed by it on England, to exempt Catholics from disabilities, on the motion of Sir Henry Parnell, for an address to the King, that the treaty might be laid before the House.—Discussion on the manumission of slaves, on the motion of Mr. Wilmot Horton, for an address to His Majesty, praying that the minutes of evidence, taken before the privy council, in the matter of the Demerara and Berbice manumission Order in Council, should be laid on the table.

(COMMONS). Examination of witnesses on the East Retford Disfranchisement case; Leadbetter committed to Newgate; the case against the borough closed, and the Common Sergeant heard in defence.

(LORDS). Question put by Lord Wharncliffe, as to the proceedings of the commission appointed during the preceding session (Dr. Roget, Mr. Telford, and Mr. Brande, commissioners), to inquire into the Supply of Water to the Metropolis. The Marquess of Lansdowne answered, that the commissioners had done nothing; first, in consequence of a dispute with their secretary as to the mode of proceeding, and subsequently, from the want of a settlement of the remuneration they were to receive.

(COMMONS). Select committee appointed on the motion of  
**March** 11. Mr. Spring Rice, to take into consideration the reports on the table of the house, relating to Education in Ireland.

(COMMONS). On the recommendation of the Finance Committee, it was resolved that the Life Annuity Act ought to be repealed.

(COMMONS). Debate on the second reading of the Penryn Disfranchisement Bill, on the motion of Lord John Russell. Mr. Secretary Peel expressed his concurrence in the former decision of the House, that the case of corruption was proved against the borough; he desired to defer the question as to the disposition of the franchise, until, by the fate of the East Retford disfranchisement bill, it was known whether there would be one or two franchises to dispose of, and consented to the second reading, on the understanding that he did not pledge himself to the transfer to Manchester.—Bill for the repeal of the Test and Corporation Acts read a second time.

(COMMONS). Before going into a committee of the whole  
**March** 18. house, on the bill for the repeal of the Test and Corporation Acts, Mr. Peel moved, that a declaration to the following effect should be substituted in lieu of the sacramental test, to be taken by persons appointed to an office or trust in corporate towns in England or Wales:—"I A. B. do solemnly declare that I will never exercise any power, authority, or influence, which I may possess by virtue of my office, to injure or weaken the Protestant Church, as it is by law established within these realms, or to disturb it in the enjoyment of any of those rights and privileges, which it now enjoys." Mr. Peel also proposed a clause, empowering the King to require the same declaration to be signed by any person appointed to any civil office, or holding any commission under the crown, and from whom by law the sacramental test would have been required. Lord John Russell consented to the going into committee, with instructions, that the provision proposed by Mr.

Peel should be referred to it. The bill, as amended, passed the committee.

(COMMONS). Debate on the East Retford Disfranchisement Bill, on the motion for reading the order of the day, for the further consideration of the report. Mr. Secretary Peel avowed his opinion of the sufficiency of the evidence of delinquency, and stated, that now having the two franchises of Penryn and East Retford to dispose of, he was ready to lay down the principle of giving the manufacturing interest one, and the agricultural interest the other. On the principle of the ample representation already enjoyed by Cornwall, the Right Hon. Secretary proposed that the franchise of Penryn should be transferred to a commercial town, and not that of East Retford. Mr. Secretary Huskisson concurred in the principle of dividing the franchises at the disposal of the House, between the agricultural and manufacturing interest; and stated, that if the case of East Retford stood alone, he should support the measure of transferring the franchise to some great commercial town. The House divided on the motion of Mr. Nicolson Calvert, "That it be an instruction to the committee, that they have the power to make provision for preventing bribery and corruption, in the election of members for the borough of East Retford, by extending the right of voting to all forty shilling freeholders of the hundred of Bassetlaw. For the instruction, 157. Against it, 121. Majority, 36.

(COMMONS). Discussion on the Penryn Disfranchisement Bill. Mr. Secretary Peel said, that he was satisfied of the case made out against Penryn; that he was disposed, in the first place, to disfranchise Penryn altogether, and secondly, to transfer the elective franchise to some large commercial town, unrepresented. Subsequently, the preamble of the bill, stating the expediency of transferring the right of returning two burgesses to Parliament, from Penryn to the town of Manchester, on account of the great and increasing wealth, trade, and population of that town, was agreed to. The house go into committee on the Repeal of the Test and Corporation Acts Bill; the clauses proposed by Mr. Peel are agreed to.

(COMMONS). Discussion on the second reading of the Freeholders Registration bill, which was moved by Lord Althorp. On a division, the numbers were, for the second reading 32, against it, 17; majority, 15.—Second reading of the bill brought in by Mr. Courtenay, to consolidate and amend the laws relating to friendly societies.

(COMMONS). Passengers' Regulation bill read a third time, and passed.

(COMMONS). Conversation on the report of the Water Companies' commission, from which it appeared, that in consequence of an opinion thrown out by Mr. Secretary Peel that the companies, and not the public, ought to bear the expenses of the required surveys, no advance had been made towards acquiring the means of recommending an efficacious plan for a new supply.

(LORDS). Statement, by the Duke of Wellington, of the measures proposed to be adopted by the ministry in regard to the Corn Laws.

(COMMONS). Test and Corporation Acts Repeal Bill read a third time, and passed.—Resolutions moved by Mr. Charles Grant, and agreed to, of the expediency that corn, &c., imported from foreign countries should be admissible for home use upon payment of certain duties set forth in a schedule.—The Penryn Disfranchisement Bill read a third time, and passed.

(LORDS). The Penryn Disfranchisement Bill read a first time, on the motion of the Earl of Carnarvon.—The bill for the Repeal of the Test and Corporation Acts read a first time, on the motion of Lord Holland.



*April* (COMMONS). The Pauper Lunatics Bill, and the Lunatic Regulation Bill, were each read a third time, and passed.

(LORDS). Third reading of the Offences against the Person Bill.

*April* On this occasion, Earl Grey and Lord Tenterden spoke against the clause proposing to abolish dissection of the bodies of murderers, which was introduced, to facilitate the procuring subjects for the study of anatomy, by removing the stigma. The Marquess of Lansdowne abandoned the clause, and it was omitted from the bill.

(LORDS). Second reading of the bill for the Repeal of the Test

*April* and Corporation Acts: On this occasion, the Archbishop of York, 17: in the name of the Archbishop of Canterbury and himself, and the Bishops of Lincoln, Durham, and Chester, as well as the Duke of Wellington, spoke in favour of the bill. The Earls of Winchelsea, Eldon, and Mansfield spoke against it. The question of the reading was carried in the affirmative without a division.

(COMMONS). Discussion on the subject of the Poor Rates, on the *Apr.* motion of Mr. Slaney, for leave to bring in a bill to declare and 17. amend the law relating to the employment and payment of able-bodied labourers from the poor-rates, and for the better rating of tenements under certain annual value. Mr. Slaney intimated his intention not to press the bill during that Session.—Debate, on the motion of Mr. Wilmot Horton, for leave to bring in a bill to enable parishes in England, under given regulations, and for a limited period, to mortgage their poor-rates for the purpose of assisting voluntary emigration. The motion was agreed to without a division.

(LORDS). Discussion on the bill for the Repeal of the Test and

*April* Corporation Acts. On moving the order of the day, for the house 21. to resolve itself into a committee on the bill, the Earl of Eldon proposed an amendment, that the declaration in the bill should not be required to be taken by such members of corporations as, within six months, should have qualified by taking the sacramental test; and that such persons as do not object to take the sacramental test, should be allowed to do so. This amendment was negatived without a division. The Duke of Wellington proposed, as an amendment to the clause imposing a declaration, that after the words in the declaration "I, A. B., do solemnly," the words "and sincerely, in the presence of Almighty God, profess and testify"—be inserted. The amendment was carried unanimously. The Bishop of Landaff moved, as an additional amendment, that after the words proposed by the Duke of Wellington, and before the word "declare," there be introduced the words "on the faith of a Christian." The Earl of Eldon proposed that in the declaration the word "declare" be left out, and the word "swear" inserted instead of it. The committee divided: for the amendment, 32, against it, 100—majority, 68. The Duke of Wellington proposed, as an amendment, that after the word "declare," should be added the words, "that I recognize the books of the Old and New Testament, received by authority in the Protestant Churches, as truly expressing the revealed will of God;" but subsequently finding that the clause last proposed by him, would effect the exclusion of catholic officers, proposed a clause to the same effect, but in more comprehensive terms, which was carried in the affirmative. The Earl of Winchelsea proposed the insertion of the words, "in our Lord and Saviour Jesus Christ," on which a division took place, when the numbers were—contents, 15, non-contents, 113—majority against the amendment, 98. Lord Tenterden divided the House on an amendment, proposing, as an addition to the declaration, "I entertain no opinion on the subject of religion, that can or may prevent my attending the morning and evening service of the Church of England, as set forth in the Book of Common Prayer,"—the numbers were—contents 22, non-contents, 111—majority against the amendment, 89. On the motion of the Earl of Lauderdale, instead of the words "within the realm," in the declaration, "in England and Wales" were ordered to be substituted *nem.con.*

(COMMONS). Motion of Mr. Warburton for the appointment of a  
*Apr.* select committee to inquire of and into the manner of obtaining  
 22. subjects for the schools of anatomy, and the state of the law affecting persons employed in obtaining or dissecting bodies. The motion was carried, and a committee appointed.

(COMMONS). Debate on the state of the Court of Chancery, on  
*Apr.* the motion of Mr. M. A. Taylor, for a resolution, that notwithstanding the appointment of the Vice-Chancellor, in 1813, further steps  
 24. are necessary to advance the general interests of the suitors by affording them a more prompt decision of causes, and to enable the court more effectually to discharge the other important duties connected with its jurisdiction. The previous question was moved by Mr. Secretary Peel, and on division the numbers were—for the previous question, 91; against it, 42; majority, 49.

(COMMONS). Debate, on the motion of Mr. Charles Grant, of the  
*Apr.* order of the day, for going into a committee on the Corn Laws Reso-  
 25. lutions. Several amendments of the proposed resolutions were negatived.

(LORDS). Renewed discussion on the Test and Corporation Acts  
*Apr.* Repeal Bill. The Earl of Eldon proposed, as an amendment, that the  
 25. words "I am a Protestant" should be inserted in the declaration after the words "on the true faith of a Christian." Division—contents, 55; non-contents, 117; majority against the amendment, 62.—An amendment, proposed by the Earl of Winchelsea, for the insertion in the declaration of the words, "I believe that the canonical books of the Old and New Testament, as set forth by the laws of this realm, are the revealed will of God," was negatived on division, of which the numbers were—for the amendment, 22; against it, 70; majority, 48.

(LORDS.) Third reading of the Test and Corporation Acts Repeal  
*Apr.* Bill. Lord Holland proposed the omission from the declaration of the  
 28. words, "on the true faith of a Christian," which was negatived, *pro formâ*. The Earl of Eldon moved the insertion of the words "that I am a Protestant" after the words "on the true faith of a Christian;" this amendment was negatived on a division, in which the numbers were—contents, 52; non-contents, 154; majority, 102. An amendment, proposed by the Earl of Eldon, that it should not be lawful for a member of a corporation, who had not taken the declaration, to do any act in execution of his office, was carried. A further amendment, proposed by the Earl of Eldon, for the insertion of a clause to remove all doubts, whether members of corporations were required to take the oath of Transubstantiation, was negatived without a division. An amendment, proposed by Lord Bexley, for the omission from the declaration, when required to be subscribed by a Jew, of the words, "on the true faith of a Christian," was negatived. The bill was passed.

(COMMONS). On the occasion of the presentation of a petition  
*Apr.* from the Victory Friendly Society of Gravesend, against the Friendly  
 28. Societies' Regulation Bill, Mr. Courtenay announced that after the bill was brought up from the committee he should not proceed further with it during the session.

(COMMONS). Debate on the second reading of the bill for the Abolition of Settlement by hiring and service: the second reading was  
*Apr.* carried without division.—Further debate on the resolutions on the  
 29. corn laws.

(LORDS). Debate, on the motion of the Earl of Darnley, for the  
*May* appointment of a select committee, to inquire into the state of the  
 1. distressed population of Ireland. The motion was negatived without a division.

(COMMONS.) Discussion on amendments proposed to the Test and  
*May* Corporation Acts Repeal Bill in the House of Lords. Several ho-  
 2. nourable members expressed their intention of agreeing to the

amendments rather than risk the rejection of the Bill.—Appointment, on the motion of Mr. Secretary Huskisson, of a select committee, to inquire into the civil government of the Canadas.

(**LOARDS**). Appointment of a select committee of the House of May Lords, on the motion of the Duke of Richmond, to take into consi-  
5. deration the State of the Wool Trade of the country. The Duke of Wellington, in consenting to the appointment of a committee, announced that it was not the intention of the government to lay any additional tax on the importation of foreign wool.

(**LOARDS**). Division, after a short debate, on bringing up the re-  
May port of the committee on the Sale of Game Bill—contents, 54 ; non-  
6. contents, 29 ; majority, 25.—The night-poaching prevention bill discussed in committee, and ordered to be printed.

May 8. (**LOARDS**). Passengers' Regulation Bill read a third time, and passed.  
(**COMMONS**). Debate on the motion of Sir Francis Burdett,  
May which was seconded by Mr. Brougham, for a committee of the whole  
8. House, to consider the state of the laws affecting the Roman Catholics, with a view to a conciliatory adjustment. The debate was adjourned.

May (**COMMONS**). Adjourned debate on Sir Francis Burdett's motion  
9. on the Catholic question. Discussion a second time adjourned.

(**LOARDS**.) The Sale of Game Bill read a third time, after a division,  
May in which the numbers were—contents, 69 ; non-contents, 62 ; ma-  
12. jority, 7.—Lord Tenterden moved an amendment, limiting the operation of the Bill to a period of four years, which was agreed to, and the Bill passed.

(**COMMONS**). Adjourned debate on the Roman Catholic Claims.  
May The House divided, the numbers were—for Sir Francis Burdett's  
12. motion, 272 ; against it, 266 ; majority, 6.

(**COMMONS**). Debate in the House of Commons on the question  
May of a proposed grant of a Pension to the family of Mr. Canning. The  
13. numbers on the division were—for the motion, 161 ; against it, 54 ; majority, 107.

(**COMMONS**). Sir Francis Burdett proposes to request a Conference with the Lords on the subject of the laws affecting Roman  
May Catholics. The Lords consent to the conference.—Debate on the  
16. proceedings of the finance committee, and on the navy estimates ; and on the question whether these should be voted before the committee had made its report concerning the navy.—In committee,—Debate on the navy estimates ; on the motion for their consideration, by the Chancellor of the Exchequer. On the proposal of a grant of 30,000 men, Sir Henry Parnell objected to the continuance of the coast blockade, which, from what had transpired in the finance committee, he concluded might be dispensed with ; he moved, as an amendment, the substitution of 28,000 for 30,000 men. The amendment was negatived without a division. The original resolution agreed to.

(**LOARDS and COMMONS**). Conference between Lords and Commons  
May on the subject of the Catholic claims. The Marquess of Lansdowne  
19. moved that the Lords be summoned to take the resolution of the House of Commons into consideration.

(**COMMONS**). Further discussion on the Supply of Water to the  
May Metropolis. In reply to Sir Francis Burdett, who called on the go-  
19. vernment at least to undertake the preliminary inquiry as to the best mode of procuring a supply of good water, Mr. Secretary Peel said, that from the report of the commission, the evidence of the scantiness of supply, and of the insalubrity, was not conclusive ; that the objection against the Thames water seemed to be rather one of feeling than of just alarm ; and that the remedy should be sought by means of individual speculation, and not of the funds of the government.

(COMMONS). Questions put by Sir Robert Wilson to the minister *May* on the subject of the proceedings of the British government towards 19. Greece and Turkey. Mr. Secretary Peel, in reply to the inquiries, stated that it was the sincerest desire of the government to fulfil punctually their share of the treaty of the 6th of July, narrowing as much as possible the precedent of foreign interference; that the declaration of war made by Russia against Turkey did not change the position of the parties with respect to the intention of obtaining a peace for Greece, although it altered the character of one of the parties into that of a belligerent.—Debate on the East Retford Disfranchisement Bill, on an amendment moved by Mr. Nicolson Calvert, for extending the franchise to the neighbouring hundred; on this occasion it was considered as understood in the House, that the proposal of giving the franchise of Penryn to Manchester would be rejected by the Lords; an appeal was in consequence made to the minister, to act on the principle laid down by him, of giving one franchise to the manufacturing interest. Mr. Secretary Peel denied that he had pledged himself as to the course he should adopt in case there was only one franchise to be disposed of, and supported the amendment. Mr. Huskisson wished for the postponement of the question.—On the division, the numbers were—for the amendment, extending the franchise to the hundred, 146; against it, and for transferring it to Birmingham, 128; majority, 18.—Mr. Secretary Huskisson divided with the minority, and subsequently moved for the omission of that portion of the amendment which disposed of the franchise. This was met by a motion that the chairman should report progress, which was agreed to.

(COMMONS). Discussion on the Usury Laws, on the motion made *May* by Mr. Powlett Thomson, to bring in a bill for their amendment.—

20. Debate on the pensions on the civil lists, on the motion of Mr. Hume, for returns relating to them; on division, the numbers were, for the motion, 52, against it, 131; majority, 79. Amendment to the Corn Importation Bill, proposed by Mr. Portman, that "London be struck out of the lists of the places where the average prices of British corn are to be taken;" the amendment was resisted, on the ground that it would change entirely the nature of the bill; on division, the numbers were, for the amendment, 36, against it, 132; majority, 96.

(COMMONS). Second reading of the Alehouses Licensing Bill. *May* On this occasion, various objections were made to the bill, some 21. to the general principle of licensing; others, to particular clauses, such as that giving country justices of the peace concurrent jurisdiction in corporate towns with the local magistracy.

(COMMONS). Select committee appointed on the motion of Mr. *May* Slaney, to consider that part of the Poor-Laws relating to the em- 22. ployment or relief of able-bodied persons from the poor-rates, and the abuses thereof; and to report their opinion thereon to the House.

(COMMONS). Corn Importation Bill passed.—Law of Evidence *May* Bill read a third time, and passed.

23. (COMMONS). Meeting of the House of Commons after the *May* Whitsuntide recess. New writs moved for in the place of members 30. who had accepted office.

(COMMONS). Ministerial explanations on occasion of the mo- *June* tion for the order of the day, for the committee on the East Ret- 2. ford Disfranchisement Bill. Mr. Huskisson explained the motives which had induced him to divide against his colleagues, on the former division on this bill, and his tender of resignation to the Duke of Wellington; he read the subsequent correspondence. Mr. Secretary Peel followed Mr. Huskisson, and explained his own and the Duke of Wellington's view of the recent transactions, and assured the House, that the difference which had taken place, had not arisen from any variance

of opinion, as to the general course of policy to be pursued in the government of the country. A discussion took place on the amendment to the preamble of the bill proposed by Mr. Nicolson Calvert, for opening the franchise to the hundred, and Mr. Huskisson's proposition to leave the question of disposal still open. On division, the numbers were, for the original motion, 258, for the amendment, 162; majority, 96. Mr. Tennyson moved an adjournment, which on division was negatived, ayes, 24, noes, 221; majority, 197. Mr. Nicolson Calvert's amendment to the preamble was put and carried.

(COMMONS). Debate on the Small Notes Bill, on the motion of June the Chancellor of the Exchequer, for leave to bring in a bill to 3. restrain the negotiation in England of promissory notes and inland bills of exchange, under a limited sum, issued by bankers and others in Scotland and Ireland. Sir James Graham moved as an amendment, the appointment of a select committee, to inquire into the state of the circulation of promissory notes under five pounds in England, and to report, &c. with reference to the expediency of making any alteration in the laws regarding them. Debate adjourned.

(COMMONS). Adjourned debate on the Small Note Bill; after a June lengthened discussion, the division was put on the question, that 5. the words proposed to be left out (by Sir James Graham's amendment) stand part of the bill; the numbers were, ayes, 154—noes, 49; majority, 105.

(LORDS). The order of the day for receiving the report of the June Pauper Lunatic Bill, discharged; and the bringing up the report 6. that day three months, agreed to.

(COMMONS). Committee of the House on the Sale of Game June Bill sent down by the House of Lords, postponed for six months, 6. on the ground that, in enacting a penalty, the Upper House had interfered with the privileges of the Commons, by originating a tax on the subject. Mr. Stuart Wortley afterwards obtained leave to bring in a bill for Legalising the Sale of Game. Offences against the Person Bill read a third time, and passed.

(LORDS). Debate on the subject of the Roman Catholic Claims, June on the motion of the Marquess of Lansdowne, that the House do 9. concur in the resolution sent up to them by the House of Commons; the debate continued to the following day, by adjournment, when a division took place, Non-contents—present, 123—proxies, 59—182. Contents—present, 92—proxies, 45—137. Majority, 45.

(LORDS). Pensions Act Amendment Bill (provision for Mr. June 10. Canning's family) read a third time, and passed.

(COMMONS). Second report of the Finance Committee (being the June result of inquiries into the expenditure of the army, navy, and ord- 12. nance) brought up and read. The principal recommendations of reduction and revision contained in the report were in the expenses incurred for the Canadas, and in the cadet departments generally. Further reductions in the expenditure of the Ordnance-office, and the abolition of the Lieutenant-Generalship, were also advised.

(LORDS). Debate on the Corn Importation Bill, on occasion of June the motion for its second reading by the Duke of Wellington. On 13. division, the numbers were—contents 86, non-contents 19; majority 67.

(COMMONS). Debate on the Scotch and Irish Bank-Note Re- June striction Bill. Mr. Hume moved, as an amendment, that the mo- 16. tion for going into a committee should be taken into consideration on that day three months. On division, the numbers were, for the amendment, ayes 24, noes 115; majority 91.

(COMMONS). Debate on the subject of the Shipping Interest, on June the motion of General Gascoyne, of a resolution that the House 17. viewed, with concern, the diminution of British shipping, and that it would, next session, inquire into the cause thereof. On this

occasion, Mr. Peregrine Courtenay, recently appointed Vice-President of the Board of Trade, declared it to be the intention of the President of the board and himself, during the recess, to give their consideration to the effect of the measures adopted by the House, with regard to the commercial intercourse of the country with other nations. The previous question was moved by Mr. Courtenay. Mr. Charles Grant and Mr. Huskisson defended, at length, the measures adopted while they were in office. General Gascoyne's motion was negatived without a division.

(COMMONS). Bill for the amendment of the Usury Laws brought  
*June* in by Mr. Poulett Thomson, rejected, on the motion for its second  
 19. reading; upon an amendment that it be read a second time that day three months. For the amendment—ayes 52, noes 40; majority against the second reading, 12. On the motion for going into a committee on the Alehouse Licensing Bill, a division took place on the clause giving the county justices concurrent jurisdiction with the local magistrates, when the numbers were—for the clause, 46, against it, 53; majority 7.

(LORDS). Penryn Disfranchisement Bill negatived without a  
*June* division, on the motion for its second reading.  
 20.

(LORDS). Discussion on the subject of Slavery in the Colonies,  
*June* on the presentation by the Earl of Grosvenor of a petition from  
 23. inhabitants of Chester. The Duke of Wellington expressed the determination of the government to persevere in the principle of the resolutions passed by both houses of parliament; and to carry the system of manumission into execution.

(COMMONS). Debate on the subject of a Misappropriation of the  
*June* Public Funds. This debate took place on a motion made by Mr.  
 23. M. A. Taylor, and originated in a fact ascertained by the finance committee, that a sum of 250,000*l.* had been, by order of the Treasury, paid over, without the consent of parliament, to the commissioners of woods and forests, by the commission for liquidating the claims of British subjects on the government of France, and subsequently expended in the alterations at Buckingham House. Mr. Taylor moved a resolution that the application of any sums of unappropriated money, to uses not voted by the House, was a misapplication of the public money, and a violation of the privileges of the House. Mr. Herries spoke in vindication of the transaction, as did Mr. Arbuthnot, Mr. Peel, and Mr. Huskisson, who moved the previous question on the first resolution. The House divided on the proposal that the question (Mr. Taylor's resolution) be put,—ayes, 102, noes, 181; majority 79. The second resolution being put, was negatived without a division.

(COMMONS). Debate on the subject of Emigration, on the mo-  
*June* tion of Mr. Wilmot Horton for a resolution pledging the House,  
 24. early in the succeeding session, to take into consideration the expediency of adopting such measures, whether of emigration on an extensive scale or otherwise, as may be deemed best calculated to diminish pauperism in Ireland, and thereby remedy the injurious effects of that pauperism on the trade and manufactures of this country. The motion was subsequently withdrawn.

(LORDS). Debate on the third reading of the Corn Bill, which  
*June* was carried without a division.  
 26.

(COMMONS). Third report of the Finance Committee brought up  
*June* and read. This report was confined to the subject of pensions  
 26. and superannuation allowances: recommending a return to the former system of forfeiture by widows on second marriage, &c., and the contribution of clerks and officers to a superannuation fund. —Discussion on the banking system, on the motion of Mr. Hume for leave to bring in a bill to compel all bankers in the United Kingdom to make out quarterly returns of the amount of their notes in circulation to Parliament. After debate, the motion was withdrawn.

*June* (LORDS). Report of the committee on the Wool Trade brought  
*27.* up, and ordered to be printed. Earl Stanhope announced his intention to propose a measure on the subject next session.

(COMMONS). Debate on the East Retford Disfranchisement Bill.  
*June* On the motion for the recommittal of the bill, Mr. Tennyson moved  
*27.* that the further consideration of the report should be postponed until that day three months. Mr. Secretary Peel renewed his declaration, that he had given no pledge as to how he should act in case of the disfranchisement of only one borough; avowed that, after the evidence given, he should be sorry to see East Retford restored to its original state; and voted for the original motion. The question went to a division on the original motion, when the numbers were—ayes, 97, noes, 42; majority, 55. A division subsequently took place on an amendment proposed by Lord Howick, transferring the franchise to the county of York: ayes, 17, noes, 95; majority against the amendment, 78. On an amendment, proposed by Lord John Russell, for disfranchising the borough simply, leaving the disposal of the franchise to the crown, the numbers were—for the amendment, 18; against it, 89; majority, 71. In the committee on the bill a division took place on Mr. Nicolson Calvert's amendment, extending the franchise to the hundred, when the numbers were—ayes, 108, noes, 43; majority, 65.—Division on the third reading of the Bank Notes' Restriction Bill: for the third reading, 59, against it, 13; majority, 46.

(COMMONS). Debate on the affairs of Portugal, on the policy of  
*June* England in her relations with that country, and on the acknow-  
*30.* ledgment of the blockade of Oporto; on the subject of which Sir James Mackintosh called on the minister for explanation.

Mr. Secretary Peel spoke in vindication of the course pursued by the government, and contended for the legality of the blockade. Dr. Phillimore maintained that the blockade was not effectual until notified, and that the British government were under no necessity of notifying it.—Debate on the Additional Churches Bill. This bill was considered by several members as a very obnoxious measure, and as giving extraordinary powers to vestries and parish officers; it was opposed in all its stages, and the forms of the house taken advantage of by repetitions of motions of adjournment, to induce the Chancellor of the Exchequer to give time for the due consideration of the question. The minister at length yielded; and, on his engaging not to press the bill further during the existing session, unless with the general concurrence of the house, the proposition for going into a committee was carried in the affirmative, without a division.

(LORDS). Debate on the Currency, on the motion of the Duke of  
*July* Wellington, for the second reading of the Scotch and Irish Bank  
*3.* Notes Restriction Bill. The Earl of Carnarvon spoke at length against the bill, and Viscount Goderich and Lord Redesdale in its favour.—The second reading was carried without a division.

(COMMONS). Debate on the subject of the Union with Ireland;  
*July* and the pledge understood to have been given at the time of the  
*3.* Union, for the concession of the Catholic Claims, as evidenced in the correspondence of the Marquess Cornwallis. The debate originated in the motion of Mr. Maurice Fitzgerald for copies or extracts of correspondence between the British and Irish governments on the conduct of the Roman Catholics, and of communications with them at the period of the Union. The mover of the question being satisfied with having given rise to a discussion, withdrew his motion.—Debate in committee on the Savings' Bank Consolidation Bill—Mr. Frankland Lewis, on the principle that the country was paying a higher rate of interest than its financial situation could afford to borrow at, viz. 4*l.* 11*s.* 3*d.* per cent., and that the advantage derived from the banks was not confined to the poor, moved an amendment restricting the amount of deposits to twenty millions.

The amendment was not then persisted in, but was agreed to on receiving the report on the 10th of July.

(COMMONS). Debate on the Ordnance Estimates, and on the non-compliance of the government with the recommendation of the

4. finance committee to abolish the office of master-general of the ordnance.—On the motion of Sir Henry Hardinge for expenses of the departments, Sir Henry Parnell moved, as an amendment, that the salary of the lieutenant-general of the ordnance be reduced from the proposed 1200*l.* to 600*l.* A long discussion was followed by a division, in which the numbers were—for the amendment, 95; against it, 204; majority, 109.

(LORDS). Alehouses Licensing Bill read a third time, and passed.

July 7. —Debate on the third reading of the Scotch Bank Notes Restriction Bill.—The bill was passed without a division.

July 8. (LORDS). Cities and Boroughs Poll Bill read a third time and passed.

(COMMONS). Division on the order of the day for receiving the July report on the Corporate Funds Bill. Mr. Fyler moved an amendment

8. that the bill should be read that day three months.—The numbers were—for the amendment, 11; against it, 30; majority, 19.—The bill was read a third time on the 10th, after a division, in which the numbers were—for the third reading, 35; against it, 4; majority, 31.

(COMMONS). Second bill for Legalising the Sale of Game, read a July third time, and passed.—Fourth report of the Finance Committee 10. brought up and read. The report condemned the system of maintaining the sinking fund by borrowing, and recommended that 3,000,000*l.*, to arise from surplus income, but neither to be raised by a new loan nor taxes, should be set apart as a sinking fund.

(COMMONS). The Budget opened by the Chancellor of the Exchequer; in his speech the minister declared the intention of the go- July 11. vernment to adopt the recommendation of the finance committee, and for the future to reduce the nominal amount of the sinking fund to that of the actual surplus of revenue over expenditure. The result of the whole amount of supplies, and ways and means, were stated to be—ways and means, for 1828, 18,869,280*l.*—expenditure, on account of the various estimates, army, navy, ordnance, and miscellaneous, 18,628,060*l.*—surplus of ways and means, 241,220*l.*

July 14. (COMMONS). Savings' Banks Bill read a third time, and passed.

(LORDS). Division on the second reading of the second Game July Bill, as originated and passed by the Commons.—The numbers were 15. —contents, 64; non-contents, 94; majority against the second reading, 30.

(LORDS). Debate on the foreign policy of the country, on the July motion of Lord Holland for information respecting the affairs of 16. Greece and Portugal. The Earl of Aberdeen spoke in vindication of the course pursued by the government, in recognizing the blockade of Oporto, and in not interfering with the revolution recently effected in Portugal. His lordship explained the situation of the allied powers since the declaration of war against Turkey by Russia; announced that the Emperor of Russia had divested himself of the character of a belligerent in the Mediterranean; declared it to be the policy of the British government to regard any considerable diminution in the power and territory of Turkey as injurious to the repose of Europe; and to place confidence in the magnanimity and moderation of the Emperor Nicholas. The motion was negatived without a division.

(LORDS). Corporate Funds Bill thrown out, on occasion of the July motion by Viscount Goderich for its second reading.—The Lord 17. Chancellor moved, as an amendment, that the bill should be read that day three months.—On division the numbers were—for the amendment, contents, 41; non-contents, 10; majority, 31.



(COMMONS.) Discussion on the Tariff of the United States, on the *July* motion of Mr. Huskisson for copies of the American tariff of 1824, 18. and the communications from his Majesty's ministers in the United States on the subject. In the speech by which he prefaced this motion, Mr. Huskisson recommended the government, if forced, after due deliberation, to a course of retaliation, to persevere in it with firmness.—The motion was agreed to.

Parliament prorogued by commission. His Majesty's Speech as-  
*July* sured the Parliament of the continuance of a friendly disposition of 28. all foreign powers towards this country; of the King's unabated endeavours to effect the pacification of Greece: that the determination of the powers, parties to the treaty of the 6th July, 1827, to effect the objects of that treaty remained unchanged; that the Emperor of Russia had consented to waive the exercise in the Mediterranean Sea of his rights as a belligerent power, and to recal the separate instructions given to the commander of his naval forces in that sea, directing hostile operations against the Ottoman Porte. With regard to Portugal, the speech notices the disappointment of the King's expectations at the result of the arrangements made for administering the government of that kingdom, and the withdrawal of his representative; and expressed reliance on the wisdom of the august sovereign, the head of the house of Braganza, to take the course which should be best calculated to maintain the interest and honour of his family, and to secure the happiness of the dominions over which it reigns. The speech engages to administer the supplies with the utmost regard to economy; and to continue a deliberate revision of the several public establishments, with a view to any further reduction compatible with the dignity of the crown, and the permanent interests of the country. His Majesty, in conclusion, congratulated Parliament on the general prosperity of the country, and the satisfactory state of the public revenue.

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### XXXIX. BRIEF NOTICE OF THE PROGRESS OF PUBLIC IMPROVEMENTS.

IN the Article, No. XXXVI. will be found an Abstract of the Private Bills of the late Session of Parliament, from which a general idea of the nature of various new projects of improvement may be obtained.—Agreeably to the plan which we adopted in the Companion for 1828, we shall recapitulate some of the most important works which are completed, or advancing towards completion.

#### 1. CHURCHES.

The "Eighth Annual Report of his Majesty's Commissioners for Building New Churches" has been printed, by order of the House of Commons. In 1827, sixty-nine churches and chapels had been completed, providing accommodation for 107,200 persons, of which number of seats 59,655 were free, and appropriated to the use of the poor. Since the last Report, fifteen churches and chapels have been completed, accommodating 20,333 persons; forty-six churches and chapels are in progress of erection; plans of nineteen others have been approved; and thirty-three plans are under consideration. The Commissioners have also proposed to make grants in aid of building thirty-one new churches and chapels. Altogether, since the opening of their commission, the

Commissioners have determined on, and made provision for, the erection of two hundred and thirteen additional churches and chapels.

In the schedule to this report we have a tabular notice of the style applied to the forty-six churches in progress of erection; forty of which are Gothic. To meet the expense of the eighty-four churches and chapels which have been built by the Commissioners, they have called for the issue of 1,133,300*l.* Exchequer Bills. The average expense of each church has, therefore, been 15,835*l.*

The Commissioners for building Churches and Chapels in the Highlands and Islands of Scotland, have commenced the building of thirty-four additional places of worship in those districts, of which the greater number are completed, or in progress of completion. To these churches new manses are attached, and ten new manses are to be added to repaired churches or chapels. The Highland Church Act is precise in its limitation of expenditure to 1500*l.* on any church and its manse.

## 2. GOVERNMENT BUILDINGS.

The repairs of the *Custom House* are finished. The *Post Office* is rapidly approaching to completion. A *Custom House* upon a scale suited to the great extent of the commerce of *Liverpool*, is about to be erected at that place.

## 3. PALACES.

The King's Palace at *Pimlico* is undergoing great alterations by raising the wings. These alterations are estimated to cost 50,000*l.*, and the whole palace 432,926*l.* A Committee of the House of Commons expresses its dissatisfaction with these alterations "not originally contemplated, for the purpose of rectifying a defect which scarcely could have occurred, if a model of the entire edifice had previously been made, and duly examined."

The splendid repairs and improvements of the domestic apartments of *Windsor Castle* have been completed; and His Majesty took possession of them on the 8th of December. The following is a description of the general extent of the improvements of this national edifice:—

In the session of 1824, the dilapidated condition of *Windsor Castle* was brought before the consideration of parliament. Members of all parties agreed upon the necessity of *preserving* and *restoring* this splendid seat of the British monarchy. A grant of 300,000*l.* was made for this public object; and commissioners were appointed to superintend its application. A further grant of 150,000*l.* has since been made. On the 12th of August, 1824, His Majesty laid the first stone of a new tower on the south side of the castle, opposite the grand avenue of the Long Walk. Previous to that time a great deal of the old and useless part of the edifice had been removed; the rottenness of many of the timbers, and the general inconvenience of the original fabric, justified the determination of parliament to restore this ancient palace.

The new gateway, which is called King George the Fourth's, was externally completed in 1826. The Queen's Lodge, and the houses which impeded the road to the castle, were then taken down. The natural application of the fine avenue, called the Long Walk, was thus realized; and it now conducts to the grand entrance to the Upper Quadrangle. This gateway consists of two towers, the York and Lancaster. The foundations and walls of the York Tower were part of the old building—the Lancaster is entirely new. These towers, which have machiolated battlements, are about 100 feet high; the gateway between them is 24 feet high.

Windsor Castle is divided into the upper and lower wards. The lower contains the ecclesiastical portions of the edifice, including St. George's Chapel. The Upper Ward is formed by the celebrated Round Tower on the west; the state apartments, including St. George's Hall, on the north; and a range of domestic apartments on the east and south, which communicate with the state apartments. The whole building is thus a hollow square, of which the three outer sides on the north, east, and south, are surrounded with a magnificent terrace. The Inner Court, or Quadrangle, is a connected building of three sides, the fourth being formed by the Round Tower, or Keep.

In reference to the external improvements, the outer side of the edifice, toward the terrace, may be now considered nearly finished. From King George the Fourth's gateway to the King's Tower at the east angle, the windows are principally of the pointed arch, this part of the castle having been partially repaired in that style by his late majesty; in the King's Tower the windows are square-headed. On the east side Oriel windows have been very generally introduced. Several of them are of extraordinary dimensions; but the propriety of their introduction can only be properly felt when we view them in connection with the internal splendour of the suite of apartments on that side. The whole edifice has been raised one story throughout. The King's Tower is of very large dimensions, and its grandeur is increased by the addition of massive corbelled battlements. One thousand tons of stone are stated to have been added to the weight which the walls of this tower sustained. The east side consists of four towers—the King's, the Chester, the Clarence, and the Black Prince's. Neither of the three latter have been machiolated, or much raised; but the alteration of the windows has produced a great increase of beauty in their exterior. Turning round the north-east angle, and immediately abutting on the Black Prince's Tower, is the new Octagon Tower; it is higher than any other part of the building, being 120 feet above the level of the terrace. This tower connects the east with the north sides, and forms a magnificent crown to the precipitous bank looking down upon the Thames. A portion of the north side, called the Star Building, had been repaired by the late King, under the direction of Mr. James Wyatt. To connect the Octagon Tower with this building, a fine suite of rooms has been erected to form a Statue Gallery.

One of the greatest improvements on the east side towards the Park, is the extension of the Terrace. In addition to the walk immediately under the windows of the Castle, a bastion has been carried many hundred feet into the Park, which unites with the north and south terraces. The walls of the new terrace are battlemented.

In the great quadrangle the change which four years has produced is very striking. Much additional height has been given to the edifice, not only by raising the building, but by lowering the surface of the whole area six, and in some places eight feet. On the south and east sides of the quadrangle, a corridor has been carried completely round; the north and east angles have been connected by a new entrance, consisting of two towers; and the low French windows of St. George's Hall, and the King's Chapel, have been replaced by long pointed arch windows, of elegant proportions. No one can conceive an adequate idea of the magnificence of the improvements, who has not a distinct recollection of the comparatively small height, and the wretched windows, of the old square. The whole of the external improvements of the quadrangle are completed. The new tower, in advance of the grand entrance, is, for its solidity, the largeness of its proportions, and the boldness of its arches and mullions, one of the most splendid parts of the building. The base is arched for carriages to pass through.

In the completion of the *interior* much praise is due to the architect for his triumph over impediments which appeared almost insurmountable. Instead of ranges of low and confined apartments, with dark and imperfect communications, Windsor Castle now contains noble suites of rooms for the monarch, and ranges of comfortable apartments for his attendants and visitors. Three hundred and sixty-nine distinct rooms have been constructed on the south and east sides. The ground floor is principally appropriated for the officers of the establishment. The south-east angle of the corridor is broken by the king's private entrance. Of this entrance the staircase is double, and unites in a landing, communicating with the great gallery of the corridor. It is lighted by a double lantern. The great gallery is formed of the corridor, which surrounds the south and east sides of the quadrangle. It communicates at various intervals with the passages and the staircases of the several towers. On the east side, the gallery is connected at the north end with a music-room, which leads on one side to St. George's Hall, and on the other, to the great suite of apartments for the king's private occupation, which run along the whole eastern front. These consist of the dining-room, drawing-room, library, and several other apartments adapted for the monarch's personal occupation. Their dimensions are of a magnificent character, and they are chiefly lighted by the Oriel windows mentioned in the notice of the exterior. These apartments are now completed, and splendidly furnished. The silk-hangings are entirely of English manufacture. The ceilings are elegant; perhaps somewhat too much departing from the Gothic into a style of foreign ornament, but altogether producing combinations of great beauty.

The alterations of this fine castle have been altogether conducted with great taste and ingenuity. It is no small merit to have retained all the principal features of the original fabric, and to have secured the most perfect internal arrangements,—to have provided for every comfort of a highly civilized age, amidst a style of architecture which belongs to a period in which security was always preferred to convenience.

#### 4. BUILDINGS CONNECTED WITH SCIENCE AND LITERATURE.

Very magnificent improvements have been going on for several years in the *University of Cambridge*. The convenience and splendour of this venerable establishment are greatly increased, by the great number of additional buildings which have proceeded from the spirit of improvement which distinguishes our own times. The *London University* has been sufficiently completed for the commencement of the Academical Session. At *Manchester* a very elegant building is now being erected, principally for the encouragement of the Fine Arts, at an estimated cost of 30,000*l*.

Since the spring of 1828 the *gardens* of the *Zoological Society* have been opened to those having a member's order, upon payment of a shilling each. One hundred and thirty thousand persons have been admitted. Many buildings have been erected for the quadrupeds and birds, all well adapted to their objects, and in good taste.

#### 5. DOCKS, BRIDGES, &c.

On Saturday, the 25th of October, the *St. Katherine's Docks* were opened, and a splendid entertainment was given by the directors on the occasion.

The site of these docks is immediately below the Tower of London, and is bounded on the north by East Smithfield, on the west and south by Tower-hill and Foss-side-road, and on the east they are separated from the London-docks by Nightingale-lane. The amount of capital raised by shares was 1,352,800*l*., of which 1,200,000*l*., including an outlay for part of the materials for the east dock—not yet completed—has been expended; 500,000*l*. will still be necessary to bring the works to perfection; and this sum will be borrowed on the security of the rates to be received by the company, for the liquidation of which debt a sinking fund will be formed. Independent of the space actually occupied by the docks and warehouses, the company possess freehold waterside property of the value of 100,000*l*., which they were obliged to purchase by the terms of the Act of Parliament, and which yields a large annual rental capable of very considerable improvement. In clearing the ground for this magnificent undertaking, 1250 houses and tenements were purchased and pulled down—no less than 11,300 inhabitants having to seek accommodation elsewhere—thus improving estates previously lying waste in the eastern part of the metropolis, and giving an additional impetus to industry and enterprise among other capitalists. The area thus obtained is about 24 acres, of which 11½ acres are devoted to wet docks. The first stone was laid on the 3d of May, 1827, and upwards of 2500 men

have since been employed, from day to day. The lock leading from the river is 195 feet long, and 45 feet broad; and is crossed by a swing bridge 23 feet wide, supposed to be the largest of the kind yet executed. This constitutes the main thoroughfare along the side of the river, from Burr-street, at the back of the warehouses, towards Iron Gate. It was designed by Mr. Telford, and the bridge furnished by Mr. Seward. The great advantage of the lock is, that it is sunk so deep that ships of 700 tons burden may enter at any time of the tide—a desideratum long wished, and, for the first time, accomplished by the St. Katherine's Dock Company. There are three gates in the lock,—the first next the river, one in the centre, and the third leading to the basin, the machinery of which was manufactured by Mr. Bramah. On the right of the lock and immediately within the dock walls, the engine-house is situated. It is furnished with a steam-engine of 200 horse power, by means of which the lock may be filled or emptied as occasion may require. A lock of 14 ft. depth can be made with the assistance of the gate-paddles in 6 minutes. The warehouses are upon the most extensive scale. They are five stories high above the ground in the fronts facing the docks, and six in those facing the streets; the former half of the ground floor being eighteen feet high, open, and supported by massive pillars, for the accommodation of vessels discharging; and the latter being divided into two stories by means of a mezzanine, and devoted to the warehousing of goods. The Smithfield range is 400 ft. by 105 ft.; the Foss-side-road ditto 475 ft. by 95 ft.; the Tower-hill ditto, 440 ft. by 125 ft.; and there are commodious vaults under the whole.

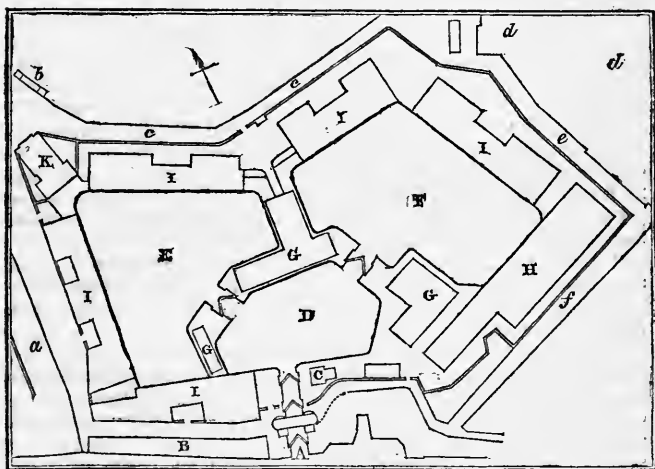
There is a liberal supply of powerful cranes below; and, over the wells or shafts, which reach from top to bottom of the building, is machinery for raising goods to the height required. Each crane has an umbrella-shaped covering to protect the apparatus from the weather, and a bell by which to announce to those above when the tackle is made secure. The columns supporting the walls of the warehouses next the dock are three feet nine inches in diameter, with Doric capitals. They are of cast iron, two inches thick. The pillars supporting the floors are also of cast iron, three inches in diameter, and so furnished with flaunches, as to give their section the appearance of a St. George's Cross. The stairs are wholly of granite, and the pavement of the quays, in the neighbourhood of the cranes, of cast iron. Sliding mooring rings are fixed in the dock walls, which rise and fall with the fluctuation of the water, so that there is no occasion for loosening or tightening the headfasts of the vessels.

In the dock-house, which is entered from Tower-hill, nearly opposite to the Mint, extensive and convenient offices are constructed; the officers of the Customs and Excise are accommodated within the building. It is a neat elevation, ornamented with three-quarter Doric columns above, and rustic work on the ground-floor. The long room for the general dispatch of business is 100 feet by 50; and the board-room and accountant's and superintendent's rooms are of commodious dimensions, communicating, by means of a railed gallery and stone steps, with the wharfs below.

The docks will be capable of containing from 150 to 160 ships at one time, independent of craft. The depth of water at spring-tides is 28 feet in the lock, being 4 feet more than is to be found in any other dock in London; and in consequence of a channel being kept clear in the river of 300 feet wide, a ship, however large, may come up to St. Katherine's dock at any time in perfect safety, with the certainty of admission.

The engineer of these works is Mr. Telford—the architect, Mr. Hardwicke.

The following plan will give a clearer idea of the various erections:—



A. Entrance from the Thames.  
B. Wharfs.  
C. Steam Engine.  
D. Basin.  
E. West Dock.

F. East Dock.  
G. Sheds.  
H. Indigo Warehouse.  
I. Warehouses.  
K. Dock House.

a. Tower Ditch.  
b. Mint.  
c. East Smithfield.  
d. London Docks.  
e. Nightingale Lane.  
f. Burr Street.

The new dock at Liverpool, for the completion of which a bill to borrow additional sums was passed in the late session, is a continuation of that splendid line of accommodation for shipping, which has been growing with the extraordinary growth of the trade of that great port. This single dock has already cost more than a million; and extensive as the other docks are, it is no uncommon case for vessels to ride in the Mersey, which is often dangerous, from the impossibility of finding other accommodation.

The last arch of *London Bridge* is rapidly advancing to its completion.

A stone bridge of a single arch has been erected across the Severn, at Over, near Gloucester. It is built of sand-stone from the Forest of Dean. The width is about 27 feet, including the

parapets, with two foot-paths. The roadway is supported upon walls between the spandrils, similar to Waterloo Bridge, and covered with slabs of stone.

Span . . . . . 150 feet.

Radius of the segment . . . . 246½ feet.

Rise . . . . . 35 feet.

A stone bridge of a single arch, of much wider span, is in course of erection near Chester.

A New Corn Exchange has been erected in Mark Lane, at an expense of 60,000*l*.

## 6. ROADS.

A select committee was appointed during the last session, to inquire into the state of the roads under the care of the Whetstone and St. Alban's trustees. The road under the care of the Whetstone trustees forms the communication between London and York and Edinburgh; between London and Carlisle and Glasgow; and between London and Leeds, Sheffield, Manchester, Liverpool, Birmingham, all North Wales and Ireland. That under the care of the St. Alban's trustees forms part of the Holyhead road. The best mode of establishing a good road is therefore properly an object of legislative inquiry. The report contains the following passages, which are interesting:—

“The Evidence proves that these roads are in an extremely bad state, that they are so weak as to be very heavy, and much worse than any other roads in the neighbourhood of London, or perhaps in any part of England where roads have as much travelling upon them as upon these two roads.

“The subsoil of these roads is wet clay, which up to this time has been left by the trustees and the surveyor, who have had the care of them, without any attempt to establish a sufficient drainage. On this clay there lies a mixture consisting of sand, earth, and small gravel, with a very small portion here and there of flints. This composition forms a road surface just only strong enough to prevent the wheels of carriages from cutting through it into the clay, and so soft in wet weather as to occasion very severe and incessant distress to horses in drawing carriages over it; while in hot weather, when the earthy part of the surface shrinks, the gravel stones are loosened, and then this composition of sand, earth, and small gravel, forms as heavy a surface nearly as it does in wet weather.

“Both these roads are repaired in the same manner, namely, by laying upon them very small and dirty gravel. It is only by incurring a great expense in raking and constantly scraping them, that the surface is not cut into ruts; and that a false appearance is given to these roads, which leads many persons, who are not strict observers of the kinds of road they travel over, to think they are not so bad as they really are.

“The number of horses employed in working twenty-five miles in this road is twenty-eight, while on a good road sixteen are sufficient for twenty-four miles; and such is the wear and tear of



horses on these roads, that they do not last near so long as horses do on good roads. One of the coach proprietors says, "The slaughter of stock on these two trusts, in all our mails and fast post-coaches, during the last winter, is beyond all calculation."

"The committee hope that the experiment which has now been tried on these roads, of the principle of weak and elastic roads, having an appearance of smoothness on the surface produced by constant raking and scraping, will at last open the eyes of the public, and turn the attention of all road trustees to secure strength and hardness as the essential qualities of a good road."

The remedy proposed for the improvement of these roads is as follows :—

"The committee are of opinion that what is wanting in order to make it a road fit for such a communication is very little short of new making the whole of it; and therefore that the public would be very much benefited if it were placed for a limited time under the management of the parliamentary commissioners and their engineer Mr. Telford. They therefore recommend, that in the next session a bill should be brought in to provide,—

1st. That the whole of this road should be vested in the parliamentary commissioners for three years.

2d. That an additional toll shall be levied to form a fund to repay the money which may be wanting to improve the road.

3d. That at the end of three years the road shall be restored to the trustees."

With respect to the road under the care of the St. Alban's trustees, the committee recommend that the same course should be taken with regard to it, except that as the additional toll to be levied for repaying the money expended on the new road from Barnet to Mimins, will be sufficient for providing a further sum for the improvement of the rest of the road, no provision should be made for levying any additional toll.

The turnpike roads in the neighbourhood of the metropolis were, at the beginning of 1827, placed under the management of commissioners. One of the principal objects proposed to be effected by this change was to equalize the rates,—and in doing this to remove many of the toll gates which, from the increase of London, stand in populous districts, often, indeed, in the metropolis itself. During the last session a second report has been presented by the commissioners, from which it appears that various important improvements in the roads themselves have been carried on under their direction, Mr. James M'Adam being their general surveyor. With regard to the removal of toll gates, and other contemplated improvements, we extract the following passages from the Report :—

"Of four toll gates which existed in the space of a mile and a half from the end of Oxford-street, the commissioners have been able to remove two, affording thereby a convenience to the public, without any diminution of revenue to the trust. The commissioners have also abolished the use of all weighing engines on their roads, which—

was a partial grievance to a particular class of traffic ; the loss of revenue by this measure is estimated at 1500*l.* a year ; and the commissioners are satisfied that it will be thought that a relief to that amount could not have been more properly given than by the abolition of a toll which was local and partial, and the collection of which involved an increased per-centage of expense to the public."

"The commissioners hope, if the state of their funds will allow it, they will in the course of the present year give effect to arrangements which they have now in contemplation for the discontinuance of night tolls, which exist only on some roads, and are from their very nature vexatious to all parties.

"The variety in the rates of toll, and in the regulations under which they are levied, has engaged the serious attention of the commissioners ; and arrangements for equalizing such rates upon equitable principles, and for simplifying such regulations, and making them generally applicable to all the tolls, are now under consideration ; and the commissioners hope to be enabled to submit a bill for those purposes to parliament early in the next session.

"The commissioners also intend to submit to the consideration of parliament the expediency of relieving the public from a considerable number of turnpike gates, which, as before reported, are placed in the very streets of the metropolis. It seems advisable that these new streets should be placed like the old ones, under the management of the respective parishes."

#### 7. CANALS AND RAILWAYS.

*The Norwich and Lowestoff Navigation* is one of the most interesting public works in progress of execution, connected with the navigation of this country.

As the objects contemplated by the undertaking are important both in a nautical and commercial point of view, and as the means by which they are to be effected are new and uncommon in England, as a work of civil engineering, we subjoin a brief account of the origin and progress of this interesting experiment.

The water communication between Norwich and the sea is, at present, confined to the river Yare, which running from Norwich to Yarmouth, a distance of about 30 miles, discharges itself into the sea at that place. This river is navigated by wherries of from 20 to 40 tons burden, employed in carrying corn, flour, and goods; from Norwich to Yarmouth, and in bringing back coals and goods from Yarmouth to Norwich. It is of course necessary that all these goods should be trans-shipped at Yarmouth, those exported from Norwich being, on their arrival at Yarmouth, shipped on board sea-borne vessels ; and those imported being, on their arrival at Yarmouth, taken up by the wherries.

About 300,000 quarters of corn and 50,000 sacks of flour are annually conveyed down the river to Yarmouth, and about 60,000 chaldrons of coals and 20,000 tons of goods are brought up the river from Yarmouth every year.

Upwards of a moiety of the whole imports and exports to and from Yarmouth belong to Norwich. The river is without a lock in its whole course, and is generally of sufficient width and depth to admit of sea-borne vessels ; but it passes, just before its arrival at Yarmouth, over a long and shallow lake called Breydon, where the vessels now used often find it difficult to get over. The embouchure of the river into the sea is frequently blocked up by shifting sands, and this is almost invariably the case when the wind blows from the east.

This bar is continually occasioning the most serious delays to commerce, as vessels are not unfrequently detained at Yarmouth a fortnight before they can get out of the river.

The act for improving this Navigation was passed in 1827. The plan proposed is to render the river Yare navigable for sea-borne vessels, from Norwich to a place about twenty miles down the river called Reedham Ferry,—to open a new cut at that place, across the marshes, about two miles and a half long, so as to join the river Yare with the river Waveney, near St. Olave's Bridge,—and proceeding along that river and up a stream called Oulton Dyke, to a small lake called Oulton Broad, to deepen and widen the two latter,—and, proceeding through the adjoining lake, Lothing, to make a passage from it to the sea, which passage will be about 700 yards long and 40 wide.

These works, which are under the direction of Mr. Cubitt, have been rapidly proceeding during the present year. The double ship locks at Swing Bridge, at Mutford Bridge, and at the upper end of lake Lothing, were completed and opened in due form by the directors of the company, on the 5th of November last, and at an expense within the amount originally estimated by the engineer. This part of the works forms the stop or barrier between the sea water of the proposed harbour of lake Lothing, and the rivers and inland waters of the country ; and the lock is made double, or with two pair of gates pointing each way both landward and seaward, so that vessels may pass the lock at all times, or with the head of water on either side the gates.

The works now in progress are principally preparatory to making the extreme cut between the sea and lake Lothing, and for building the great mooring sluice and lock at the entrance, which is to serve the purpose of occasionally retaining the contents of the harbour, (about 200 acres) at the level of high water, and by suddenly discharging the same at low water, to clear and keep open a passage to a depth of 10 to 12 feet below low water of the sea. The sluice is to be 50 feet in clear width, and 24 feet deep, for the course of the effluent water, which is sufficient for the passage of the largest steam-vessels hitherto constructed ; and this entrance sluice is to be so constructed as to form a lock for vessels into and out of the harbour during the time of ebb tide, or when the sluice is set for retaining a harbour, or reservoir of water. A large swing bridge is also to be erected across the sea end of the sluice, in a line with the present turnpike road from Yarmouth and Lowestoff to London. It is expected that this part of the

works will be completed in 1829. It will be the first and only artificial harbour in the kingdom; and from this artificial harbour will extend a ship navigation inland in two branches, one of 30 and another of 20 miles in extent, without a single lock on either.

*The Liverpool and Manchester Railway* is the most important and extensive enterprise which the nation has for a long time witnessed. The experiment is novel in many of its details. We are favoured with a communication from the engineer, which enables us to offer a complete account of the progress of these interesting works.

The total quantity of merchandise passing between Liverpool and Manchester is 1200 tons per day. This immense aggregate tonnage is at present subject to all the delays incidental to the river-navigation. The *travelling* between Liverpool and Manchester is upon the same extensive scale. The line of railway passes through a rich and extensive coal-district, in full working, of which a great proportion is brought to market by land-carriage;—the consumption of coal in Liverpool and Manchester is one million tons per annum. It thus appears that the means of affording employment to such a line of communication as the Liverpool and Manchester railway are altogether enormous; and when the rapidity and certainty of the conveyance by locomotive engines are added to the advantages of a shorter road even than that by which the mail travels, it is evident that the establishment of this railway between the great metropolis of the cotton manufacture and that port which receives a larger supply of the raw material than all the ports of the world put together, is an object, not only of local utility, but of the highest national importance.

The following is the interesting communication to which we have alluded :—

“*Liverpool, Nov. 1, 1828.*”

“Sir,

“Agreeably to your request, I here send you as correct and curtailed an account of the state of our works as my limited time will admit.

“I shall commence with the tunnel under the town of Liverpool, and proceed along the line towards Manchester, giving at each place where work is going on, a statement of the progress made, and also of that which remains to be completed.

“The first shaft was commenced in October 1826, but the excavating of the tunnel did not take place until January 1827, and was completed in the early part of September 1828. It measures 16 feet high, 22 feet wide, and 2200 yards long. The total quantity of cubic yards excavated, including the extra quantity where artificial arching is required, amounts to 80,000 yards. The rock in which the tunnel is excavated belongs to the new red sandstone formation; it varies much in its hardness, texture, and colour; the varieties in the latter character are in some situations very striking.

“In a considerable portion of the tunnel we found the rocks so

hard and compact, as to render brick arching unnecessary ; in other parts it was traversed ' by slips ' which had shattered the adjacent rock. In these situations strong arching was adopted. In the length of the tunnel, at nearly equal distances, there are three of these slips remarkable for their magnitude. At each of them the strata have evidently fallen on the one side, or been elevated on the other, from 40 to 50 feet. From their relative positions it is probable that the surface of the ground at and near the Mersey has once been 130 feet higher than at present. The chasms or rents caused by these movements of the strata are filled with clay so compact as to be impervious to water.

" At the lowest level in the tunnel we found a stratum of ' blue shale,' which exactly corresponds with another stratum at a much higher level, and similarly associated with the adjoining rock. This circumstance naturally leads to the conclusions above stated, with regard to the extent and direction in which the movements of the strata took place. Where we encountered much water Roman cement was employed as mortar, which has fully answered my expectation in rendering the tunnel dry. We have commenced laying the permanent road in the tunnel, and it will in a few months be completed.

" At the lower end of the tunnel, where the warehouses are to be situated, the excavation is 20 feet deep. The total quantity to be excavated is 40,000 cubic yards, of which 5000 are removed. At the higher entrance into the tunnel the cutting is 50 feet deep, two thirds of which is red sandstone, the remainder is marle. The contents of this excavation is 150,000 cubic yards ; 112,000 have been removed.

" *Olive Mount excavation.*—This is the most extensive excavation of rock in the whole line ; it is upwards of two miles in length, the greatest depth is 70 feet, which is at that place entirely rock, of the same character as that in the tunnel. This work contains 480,000 cubic yards,—301,782 are removed. Sufficient stone has been obtained from this excavation to build all the necessary bridges and walls on this portion of the line, as also blocks for the rails.

" *Broad Green embankment.*—This is nearly three miles long, and for a distance of 400 yards will average 45 feet in height ; it is made up by the material from the excavation last mentioned, and that of Huyton and Rainhill at the other end. The content is 550,000 cubic yards, 330,000 of which are completed,

" *Huyton excavation.*—This work is now finished ; it has produced 47,000 cubic yards, the greater part of which has been employed in forming the last-mentioned embankment. Suitable rock for building the necessary bridges and walls in this part of the line was obtained during the progress of this work.

" *Rainhill excavation.*—The material from this has hitherto been removed to form embankments in its vicinity. We expect a sufficient quantity of stone will be furnished by this cutting for the masonry at and near it. The total content is 220,000 cubic yards ; 141,260 have been removed.

“*Sutton excavation* is situated two miles from Rainhill: its content is 144,000 cubic yards; 66,800 yet remain. The material from this situation is employed to fill up the lower parts of the line, towards the Sankey canal, a distance of three miles, passing over Parr Moss nearly on a level. This moss varies from 6 to 20 feet in depth, and extends in the direction of the line of railway three-quarters of a mile. The plan adopted in crossing the Sankey Valley is partly by a viaduct supported on arches, and partly by embankments. The viaduct is supported on 9 arches, each 50 feet span, and varying from 60 to 70 feet in height. The wingwalls, piers, and abutments are supported on piles, driven from 20 to 30 feet deep below the surface. Piling in this situation is required, from the bottom of the valley being made up entirely of sandy alluvium at least thirty feet in thickness, and consequently unfit for foundations in a work of this magnitude. The embankment which joins the viaduct attains the height of 60 feet, and will yet require 60,000 cubic yards,—140,000 are already embanked. There being no contiguous excavation of sufficient magnitude for forming this work, we have purchased land for supplying the deficiency.

“*Newton Bridge*.—Near Newton the railway passes over the main post-road between Warrington and Bolton, and also a small river, at an elevation of 40 feet above the water. This bridge has four arches of 30 feet span each.

“*Kenyon excavation*.—This work exceeds in magnitude any other on the line. It contains 700,000 cubic yards—nearly one-half is completed; the material, which consists of sand with a superstratum of clay, is in part required to form embankments on the low lands on approaching Chat Moss, and also towards Newton in the opposite direction.

“Chat Moss extends four miles on the line of road; on each side of the Moss the land lies low; on the western side an embankment is formed of moss nearly a mile in length, and varying from 10 to 20 feet in height, which stands extremely well; the slopes of this embankment are a little more upright than the angle of 45, which, from our experience, stands better than if more inclined. It is now covered with a material from two to three feet thick, consisting of sand and gravel. The permanent road is laid upon this covering, and remains very firm; the quantity of excavations made in the moss to form the embankments adjoining amount to 520,000 cubic yards. That portion of the Moss about three-quarters of a mile from the western edge, called the ‘Flow Moss,’ from its extreme softness, is also covered with sand and gravel; underneath I have laid hurdles thickly interwoven with twisted heath, which forms a platform for the covering. Two years ago a person was not able to walk over this portion of the Moss, except in the driest weather; at present we have horses travelling with loads of from six to twelve tons.

“A considerable embankment is completed near the centre of the moss, and resists pressure remarkably well. From the termination of the last work for a mile there is little required except drain-

ing, the surface being uniform, and nearly at the desired level. Thenceforward the surface descends, consequently an embankment is required, which gradually increases until it attains the height of 20 feet or more.

"The foundation in this part being exceedingly soft, we have experienced some difficulty during its formation where the height is great, from the shrinking. Notwithstanding this, in the course of next summer we shall have a good road over this part. Much advantage has been derived by removing the heathy surface with a spade depth of the moss on each side of this embankment.

"This expedient accelerates the drying of the substratum of moss, by presenting a surface to the atmosphere much more favourable to evaporation than the heath; indeed, the latter being a bad conductor of heat, tends much to keep the temperature of the moss below that of the air. The covering of moss, from the nature of the surface which it presented to the atmosphere, also materially assists in reducing the temperature of the subjacent moss by the rapid radiation of caloric.

"*Eccles Excavation.*—This work extends from Eccles to Manchester. 145,000 cubic yards are excavated, 150,000 remain to be removed; nearly the whole of the earth from this excavation is required to complete the embankment adjoining Chat Moss.

"*Manchester Bridge.*—This bridge is not yet commenced; it will consist of two arches, each 58 feet span. The road-way will be raised 40 feet above the water of the Irwell over which it passes.

*List of Bridges, with their dimensions, already erected on the line.*

8 Bridges	12 feet span	15 feet high	37 feet long
2 do.	12 do.	18 and 20 do.	30 do.
2 do.	22 do.	18 and 19 do.	30 do.
4 do.	30 do.	17 19 26	30 average
1 do.	14 do.	12 feet	30 long
1 do.	24 do.	12 feet	30 do.
2 do.	16 do.	16 and 18 average	30 do.
2 do.	7 do.	7 do.	50 and 50 yards
1	Compound bridge, wood and brick, 16 feet span, 24 feet high, and 25 feet long.		
*1	Sankey valley, 9 arches, 50 feet span, and averaging 65 feet high.		
1	Newton, 4 arches, 30 feet span, and 40 feet high.		
<hr/>			
25	Total.		
36	Culverts of large dimensions, with several others of a smaller size.		

GEORGE STEPHENSON."

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\* This bridge is not yet completed, but will be in the course of next summer; the whole of the others in the above list are finished.

## XL. PATENTS.

It has been found impossible to give any detailed account of Mechanical Inventions, without incurring the risk of praising some projects, of which the utility might not have been established; and of omitting others deserving of commendation. The improvements in machinery, and the additions to the conveniences of life, are so various and extensive, that we could not adequately treat the subject without occupying a space disproportionate to the limits of this little work. We, therefore, think it best to publish a list of Patents, without observation: premising that many valuable improvements are not secured by any patent right.

## PATENTS SEALED, JANUARY TO OCTOBER, 1828.

*Air Stoves.*—Improvement in, Mr. G. Stratton, Hampstead Road.

*Alum.*—Improvements in making, Mr. W. Strachan, Avon Either, Denbigh.

*Anchors.*—Improvement in, Lt. W. Rogers, R. N., Norfolk Street, Strand.

*Blowing Apparatus.*—Improved application of Air, Mr. J. B. Neilson, Glasgow.

*Bricks.*—Improvement in making, Mr. W. Mencke, Peckham, Surrey.

*Cables and Anchors.*—Improvement in, Mr. J. Moffatt, Coleman Street.

*Chains.*—Improvement in, Mr. J. Hawkes, Weymouth Street, Middlesex.

*Calico Printing.*—Defence from the action of Acids, Mr. Duffy, Jun., Ball's Bridge, Dublin.

— Improvement in Block-printing, Mr. C. A. Applegath, Crayford, Kent.

— Apparatus for, E. G. Atherley, Esq., York Place.

*Cana's.*—Method of transferring Vessels, Mr. J. Brownhill, Sheffield.

*Cartridges.*—Improved, Mr. E. F. Orson, Princes Square, Finsbury.

*Chair-Beds.*—Surgical improvement in, Mr. Wm. Newton, Chancery Lane.

*China.*—Method of cementing, Mr. R. G. Jones, Brewer Street, Golden Square.

*Chronometers.*—Improvement in, Mr. J. G. Ulrich, Cornhill.

*Cloth.*—Improvement in pressing, Mr. J. C. Daniell, Bradford, Wilts.

— Improvements in Machinery, Mr. J. C. Daniell, Bradford, Wilts.

— Improvements in Shearing, Mr. C. Hooper, Marston Bigott, Somerset.

— Improvements in Dressing, Mr. J. C. Daniell, Stoke, Wilts.

— Improvements in Shearing, &c. Messrs. Foxwell, and W. and B. Clark, Minchin Hampton.

*Coal Gas.*—Improvements in Apparatus for making, Mr. J. Bruton, Bromwich, Staffordshire.

*Cooking.*—Improvement in Apparatus, Mr. R. Price, Bristol.

*Copper.*—Improvements in smelting, Mr. J. Jones, Amluch, Anglesea.

*Dry Rot.*—Prevention of, Mr. J. Bramah, Pimlico.

*Dyeing.*—Improvements in, Mr. J. Halls, Jun., Ordsall, Manchester.

*Edge Tools.*—Improvements in Manufacture, Mr. J. Griffin, Witney Moor, Dudley.

— Improved Apparatus for sharpening, Mr. F. Westley, Leicester.

*Elastic Cushions.*—Improvement in, Mr. J. Pratt, New Bond Street.

*Epsom Salts.*—Process for making sulphate of Magnesia, Mr. W. Grisenthwaite, Nottinghamshire.

*Filtering.*—Improvement in Apparatus, Mr. J. Stirling, Commercial Road, Lambeth.

*Filtration.*—Improvements in, Mr. W. Bell, Lucas Street, Commercial Road.

*Flax.*—Improvement in dressing, Mr. P. Taylor, Hollingwood, Lancashire.



- Flax*.—Mode of preparing, Mr. J. Kerks Law, Glossop Dale, Derbyshire.
- Flax Yarn*.—Improved process for preparing, Mr. J. Bartlett, Chard, Somerset.
- Fluids*.—Raising and circulating in heated state, Mr. T. Fowler, Torrington, Devon.
- Food*.—Method of preserving, Mr. D. Currie, Regent Street.
- Fruit*.—Invention of heat wall, Rev. I. A. H. Grubbe Stanton, St. Barnard, Wilts.
- Fulling Machine*.—Improvements in, Mr. Jobbins, Uley, Gloucester.
- Fur*.—Improved Machine for cutting, Mr. J. Baring, Broad Street Buildings.
- Furnaces*.—Improvements in, Mr. J. Gilbertson, Heriford.  
— Mr. W. Brunton, Leadenhall Street.
- Gas Works*.—Improved Apparatus, Mr. R. Wittey, Hanley, Staffordshire.
- German Cement*.—Invention of, Mr. Tullwood, Jun., Stratford.
- Harness*.—Improvements in, Mr. J. Otway, Walsal, Stafford.
- Hats*, (water-proof).—Improvements in, Mr. J. Blades, Clapham, Surrey.  
— Improvement in making, Mr. R. Rider, Redcross Street, Surrey.  
— and *Bonnets*.—Improvements in, Mr. J. B. Laurey, Exeter.  
— *Caps*.—Improvement in making, Mr. T. R. Williams, Norfolk Street, Strand.
- Heat*.—Improvement in communicating, Messrs. J. T. Beale, Whitechapel, and G. R. Porter, Old Broad Street.
- Hemp, Flax, &c.*—Improved Machine for dressing, Mr. S. Lawson, and Mr. Walker, Leeds.
- Horse Lancets*.—Improvement in, Mr. W. Weiss, Strand.
- Horse-Shoes*.—Improvement in, Mr. W. Percival, Knightsbridge.
- Hydraulics*.—Improvement in Machine, Mr. H. Marriott, Fleet Street.  
— Improvement in, Mr. A. Siebe, Prince's Street, Leicester-Square.  
— Improvement in, Mr. J. Neville, Shad, Thames.
- Iron*.—Improvements in making, Mr. J. Botfield, Hopton Court, Salop.
- Lace*.—Improvements in making, Mr. W. Morley, Nottingham.
- Lace Machinery*.—Improvements in, Mr. J. Levers, Nottinghamshire.
- Latches*.—Improvements in, Mr. C. Chubb, St. Paul's Church Yard.
- Leather*.—Composition for Waterproofing, Mr. B. C. Witherstedt, Commercial Road.
- Liquor Cocks*.—Improvements in, Mr. W. Gossage, Leamington Prior, Warwick.  
— Improvements in, Mr. W. Stocken, Martock, Somerset.
- Letter-Press Printing*.—Improvements in Machinery, Mr. D. Napier, Warner Street, Fitzroy Square.
- Locomotive Carriages*.—Improvement in, Messrs. J. and S. Seaward, Poplar.
- Masts*.—Improvement in, Mr. T. Milman, Poplar.  
— Improvement for securing and releasing, S. Brooking, Esq., Plymouth.
- Masts and Yards*.—Improvements in bands, Mr. J. F. Atlee, Deptford, Kent.
- Metal Stud*.—Invention of, Mr. T. Jackson, Red Lion Street.
- Musical Instruments*.—Improvements in, Mr. A. B. Fentura, Cirencester Place, Fitzroy Square.
- Nails*.—Improvement in making, Mr. E. Hancorn, Skinner Street, London.
- Navigation*.—Improvement in propelling Machinery, Mr. C. Harsleben, New Ormoud Street.
- Optical Instruments*.—Improvements in, Mr. W. F. Hamilton, Asylum Buildings, Lambeth.

- Paper*.—Improvement in making, Mr. G. Dickinson, Buckland Mill, Dover.  
 ——— Improvement in making, Mr. J. Palmer, Globe Road, Mile End.  
 ——— Improvement in making, Mr. Compton, Tamworth.  
 ——— Improvement in making, Mr. E. Taylor, Marsden.  
 ——— Improvement in cutting, Mr. E. Cowper, Clapham Road Place.
- Paper-Hangings*.—Colouring Machines for, Mr. T. Harris, Foley Place.
- Piano-Forte*.—Improvement in, Mr. J. H. A. Gunther, Camden Town.
- Improvements in, Mr. R. Wurnam, Wigmore Street.
- Poison*.—Chemical prevention of, Mr. J. J. Watt, Stepney.
- Power Engine*.—Apparatus for generating Steam, &c., Mr. S. Hall, Basford, Notts.
- Propelling Vessels*.—Mr. Jackson, St. Andrew, Dublin.  
 ——— Mr. W. Nairne, Edinburgh.  
 ——— J. Melville, Esq., Upper Harley Street.  
 ——— Mr. J. J. Isaac, Edgware Road.
- Propelling Carriages*.—Mr. S. W. Wright, Mansfield Street, Borough Road.
- Propelling Carriages and Vessels*.—Mr. Gough, Salford, Lancaster.  
 ——— C. C. Bombas, Esq., Inner Temple.
- Pumps*.—Improvements in, Mr. J. R. Fitzmaurice, Commercial Road.
- Railways*.—Improvements in, Mr. W. Losh, Benton House, Northampton.
- Refrigerators*.—Improvements in, Mr. W. E. Cochrane, Regent Street.
- Refrigeratories*.—Apparatus for, Mr. J. Vallance, Jun. Brighton.
- Roads*.—Materials for rendering durable, J. B. Macneill, Esq., Foleshill.
- Rupture*.—Improvements in the Apparatus for, Mr. T. Adams.
- Sails*.—New method of making, Mr. A. Brooking, Plymouth.
- Scientific Apparatus*.—Instruments for Mathematical Instruction, Captain H. Muller, Doughty Street, Middlesex.
- Screws*.—Improvement in making, M. L. W. Knight, Mansfield Street, Surrey.
- Sealing-Wax*.—Improvement in, P. R. Mason, Esq., Middle Temple.
- Sheathing of Ships*.—Improvements in, G. S. Pattison, Esq., Old Burlington Street.
- Skins*.—New machine for splitting, Mr. H. Duxbury, Pomroy Street, Kent Road.
- Spinning*.—Improvements in Machinery, Mr. J. Ford, Vauxhall.  
 ——— Improvements in, Mr. W. Sharp, Manchester.  
 ——— Improvements in, Mr. J. Rhodes, Jun., Wakefield.
- Spurs*.—Improvement in, Mr. H. Maxwell, 99, Pall Mall.
- Steam Engines*.—Improvements in, Mr. John Evans, Jun., Wallingford, Berks.  
 ——— Improvements in, Mr. S. Clegg, Chapel Walks, Liverpool.
- Steam Engine*.—Improvements in, Mr. J. Tippet, Gwenap, Cornwall.
- Stoves*.—Improvement in, Mr. J. Buddle, Wall's End, Northumberland.
- Sugar*.—Improvement in refining, Mr. J. Davis, Leman Street, Goodman's Fields.  
 ——— Improvement in refining, Mr. T. Williams and Mr. J. Powell, Bristol.
- Thread*.—Improved, Mr. T. Lawes, Strand.
- Tubes and Rods*.—Improvement in Manufacture, Mr. T. Breidenback, Birmingham.
- Type*.—Mechanical Improvement in Casting, Mr. T. Aspenwall, Bishopgate Church Yard.
- Walls*.—Improvements in, Mr. C. Hitch, Jun., Ware, Herts.
- Water*.—Apparatus for raising, Mr. A. Bernharde, Fitzroy Square.

- Water Courses.*—Improved method of cleansing, Professor Farish, Cambridge.  
*Weaving.*—Improvements in, Mr. W. Pownall, Manchester.  
 ———— Improvements in, Mr. G. Scholefield, Leeds.  
 ———— Improvements in, Mr. E. Barnard, Nailsworth, Gloucester.  
*Weighing Machines.*—Improvements in, Mr. R. M. Payne, Strand.  
*Weights.*—Improved method of lifting, Mr. T. Revis, Walworth, Surrey.  
*Wheel Carriages.*—Improvements in, Mr. J. L. Higgins, Oxford Street.  
*Windlas.*—Invention of additional mechanical power, Mr. G. J. Young, New-castle-upon-Tyne.  
*Woollen Cloth.*—Improved machine for cutting, &c., Mr. W. Marshall, Huddersfield.

## XLI. CHRONICLE OF EVENTS IN 1828.

### January.

1. A conspiracy discovered in Mexico against the government, and the President Guadalupe Victoria. The Vice President of the Republic, General Bravo, is implicated and arrested.  
 Opening of a new cast-iron bridge, of one arch, 150 feet in span, over the Severn, at Holt Fleet, five miles above Worcester.  
 The sloop Fanny, from St. Malo, wrecked in the Jersey Roads, with the loss of two of the crew and eleven passengers, among whom was Lord Harley.
2. Mr. O'Reilly, the British Consul at Guatemala, murdered by his servants. The principal perpetrator, Bonilla, was subsequently tried, convicted, and executed.  
 The session of the Portuguese Cortes opened by the Infanta Regent.
4. Important change in the French cabinet. The ministry of Messrs. de Villèle and Peyronnet is dissolved.
5. The Sultan issues an order for the banishment of 132 French, 120 English, and 85 Russians settled in the Turkish Empire.  
 General Arena and Father Martinez executed at Mexico on a charge of high treason against the state.
6. The office of Director-General of the Police in France abolished by royal ordonnance.
10. Firman issued by the Porte for the banishment from the capital of the Turkish Empire, to Angora in Asia, of all Armenians of the Catholic persuasion, without distinction of rank, age, or sex.
11. The bank of Messrs. Webb and Son, at Ledbury, Herefordshire, entered and robbed of property to the value of 10,000*l*.
12. A violent hurricane at Plymouth, by which 13 merchant vessels were driven on shore and wrecked on the night of the 12th and 13th.  
 Second irruption of water into the Thames Tunnel. At the moment the water penetrated there were 135 persons in the Tunnel. In the space of fifteen minutes it had reached within two feet of the vaulting of the arch. Six workmen perished.
15. Commencement of the session of the Parliament of Upper Canada. One of the first proceedings was the appointment of a Committee to inquire in whom the right of nominating the officers of the House was vested.  
 The Consuls of France and England at Smyrna cease their functions.
17. The Stirling Steam Packet wrecked on the Ardgowar shore, in the Bay of Inverscaddel. Passengers and crew, with the exception of one man, safely landed.
18. The Count Capo d'Istria arrives in Greece on board the Warspite, British ship of war, and assumes the office of President of the Republic.
25. The Duke of Wellington is appointed first Lord of the Treasury,

and forms a new ministry. Mr. Goulburn, Chancellor of the Exchequer; Mr. Herries, Master of the Mint; the Earl of Aberdeen, Chancellor of the Duchy of Lancaster.

27. The Russian General Paskewitsch renews hostilities against Persia, in consequence of the threats of Feth-Ali-Shah not to ratify the treaty of peace, lately concluded, until the Russian army had retired beyond the Araxes and evacuated Adzerbidjan. Ourmia surrenders to the Russians.

28. Completion of the British Cabinet, by the nomination of Earl Bathurst as President of the Council; Lord Lyndhurst, Lord Chancellor; Lord Ellenborough, Keeper of the Privy Seal; Mr. Peel, Secretary of State for the Home Department; Mr. Huskisson, Secretary of State for the Colonies; Earl of Dudley, Secretary of State for Foreign Affairs; Viscount Melville, President of the Board of Control; Mr. C. Grant, President of the Board of Trade; Viscount Palmerston, Secretary at War.

29. Opening of the Session of the British Parliament. For its proceedings, see "The Chronicle of Parliament."

31. Sitting of the Germanic Diet resumed.

Attack on Carabusa by Sir Thomas Staines, in the Isis frigate, with vessels, French and British, under his command, the Greeks having been first summoned, but in vain, to give up the chiefs of the pirates and their vessels. The forts evacuated are put into the possession of a chief appointed by the President Capo d'Istria, and the vessels in the port are sunk or taken possession of.

### *February.*

1. M. de Vatisménil is appointed Grand Master of the University of Paris, and charged with the superintendence of public education; formerly under the direction of the Minister for Ecclesiastical Affairs.

Interview between the Lord High Commissioner of the Ionian Islands and Ibrahim Pacha at Modon, on the subject of the affairs of the Morea.

2. The national assembly of Greece convoked by the Senate. The existing legislative power dissolved. The Panhellenion, or Grand Council of State for the government of Greece, established by decree.

4. Opening of the French Chambers. The principal points of the King's speech were—the continuance of friendly relations with other European powers; expectation that the treaty of the 6th July, 1827, for the termination of the struggle between the Turks and Greeks might be effectually executed without resort to force; approaching withdrawal of French troops from Spain; resolution of the government to exact reparation for the aggressions committed against the French flag by the subjects of the Brazilian empire; domestic affairs of the empire; diminution in the produce of the revenue and excess in the expenditure; progressive extension of commerce and manufactures; separation of the direction of public education from that of ecclesiastical affairs.

5. Re-election of Mr. Huskisson as Member of Parliament for Liverpool; his explanation of the recent changes in the ministry.

9. Don Miguel and suite leave England for Lisbon.

10. A fire breaks out in the suburbs of the Havannah, which destroys three hundred and fifty houses, and renders destitute upwards of 2,000 persons.

13. Public concert at Guildhall for the benefit of the Spanish and Italian refugees. The nett profits exceeded 1000*l*.

14. Establishment of a National Bank of Greece proclaimed by the President.

15. The Duke of Wellington resigns the office of Commander-in-Chief of the army, which is assumed by Lord Hill, with the title of Commander of the Forces.

18. Marriage of the Princess Feodore, daughter of the Duchess of Kent, with the Prince Hohenlohe Laugenbourg.

A dreadful storm on the coast of Spain, at Cadiz, and the vicinity. At Algeiras, out of thirteen vessels twelve were sunk: and at Gibraltar, between 160 and 180 sail were destroyed.

22. The Infant Don Miguel arrives at Lisbon; he is received on landing by the Infanta Regent, and greeted by the assembled crowds with shouts of "Long live the Infants," intermingled with acclamations of "Miguel the Absolute King."

Peace concluded between Russia and Persia, at Turkmautshay (Turkoman Ischan). By this treaty the Provinces of Erivan and Nakhetchewan are ceded by Persia, and afterwards by an Ukase of the Emperor Nicholas annexed to the Russian Empire by the title of the Province of Armenia.

Arrival in London of Mr. Stratford Canning, the late British Minister at the Ottoman Porte.

M. Royer de Collard named President of the French Chamber of Deputies.

Don Miguel takes the prescribed oaths as Regent of Portugal.

27. Appointment of the Marquess of Anglesey to be Lord Lieutenant of Ireland.

28. Fall of the New Royal Brunswick Theatre in Wells-street, Wellclose-square, during a rehearsal of 'Guy Mannering.' Mr. Maurice, one of the proprietors, four of the performers, and five other persons were killed on the spot. Mr. Carruthers, also a proprietor, and several other persons were much bruised and wounded, of whom two afterwards died at the hospital. From subsequent examination of the bodies, and the verdicts of the juries, the accident appears to have arisen from the suspension of an improper weight to the roof, which was of cast iron. The theatre had been opened for the first time on the Monday previous.

29. Disastrous occurrence at Manchester on occasion of the launch of a vessel at the Wharf of the New Quay Company. The ship on descending from the stocks heeled and upset. Upwards of 200 persons, who were on deck, were precipitated into the river, and 51 lost their lives.

### *March.*

1. A mob assemble in the front of the Palace of the Ajuda, at Lisbon, stopping the persons coming to Court to offer their felicitations to Don Miguel, obliging them to cry "Long live the Absolute King." These proceedings continue until the 5th.

Soliman Bey, commander of a division of the Turkish forces forming the garrison of Tripolizza, arrives at Modon with his troops from the latter place, which he had evacuated and destroyed.

2. The Greek Admiral, Miaulis, destroys or captures, at Scopelo, 41 vessels suspected of piracy; 38 more seized by him on the same grounds a few days afterwards at Skiatho.

Return of the President, Count Capo d'Istria to Napoli di Romania, the seat of the government of Greece. The fortress of Palamide, the upper citadel, is delivered up by Theodoraki Griva, the Greek commander, who submits to the new government. The fort of Albanitika, the lower citadel, is surrendered on the 5th by Phomatara, who also submitted. The government of Napoli is conferred, by the President, on Lieut.-Col. Heidigger, a Bavarian officer in the service of the Greeks. The occupation of the fortifications by the Spezziottes and Hydriotts, in the pay of the constituted government, takes place on the 7th.

3. Abdication of the crown of Portugal by Don Pedro, Emperor of the Brazils, in favour of his daughter, Donna Maria da Gloria, by decree of this date. The decree charges the Infant Don Miguel, Regent of Portugal, with its execution.

The long room at the Custom-house opened for the first time since the giving way of the foundation of the eastern part of the building in February, 1825.

4. The Court of Aldermen of London rescind the standing order made in 1785, that baptized Jews should not be admitted to the freedom of the city. The decision was come to on the case of Messrs. Saul, who had been thirteen years applying for the privilege.

5. Extraordinary spring tide of the Thames, which, in consequence of the prevalence of an easterly wind, rose to a great height, inundating the low places in Lambeth and the vicinity, and doing considerable damage to the wharfs, &c. contiguous to the waterside.

8. The address of the French Chamber of Deputies in answer to the King's speech on opening the session presented to his Majesty. The most remarkable part of the address is that which conveys a condemnation of the proceedings of the late ministry.

9. Robbery of the Greenock bank, of property to the value of thirty thousand pounds.

11. Don Miguel changes the command of the provinces and the Colonels of the Constitutional regiments, for other officers more attached to his person.

13. Tahir Pacha relieves the Turkish garrison of Scio, throwing in a reinforcement of 3,500 men from Tschme on the Asiatic shore; the Greek besiegers quit their position, leaving their artillery behind. They evacuate the island on the 15th, when 400 fugitive inhabitants are received on board French vessels.

Decree for the dissolution of the Portuguese Chamber of Deputies issued by the Regent. Both Chambers are closed on the following day.

14. Eruption of Mount Vesuvius, which continues until the 22nd, but without doing material damage.

16. Exchange of ratifications of the Treaty of Commerce between the Emperors of Austria and Brazil at Vienna.

17. Don Miguel abolishes by decree the law of elections of the 7th August, 1826, and nominates a commission charged to make regulations for a mode of election conformable to that anciently in usage.

Death of Sir James Edward Smith, M.D., F.R.S., First President of the Linnean Society.

18. The blockade of the ports of the Isle of Candia, and of those of Modon, Coron, and Navarin, declared by the President of Greece. The command of a naval division destined for the purpose of executing the blockade given to Admiral Sachturin.

19. Wreck of the Venus steam-packet from Waterford to Dublin, between Gorey and Arklow, occasioned by the breaking of the engine. Nine persons were drowned.

21. New Peruvian Constitution signed by the President of that Republic. This change had overturned the influence of Bolivar in Peru.

Commission of inquiry into the state of the Common Law appointed, in pursuance of the address of the House of Commons moved by Mr. Brougham. See "*Chronicle of Parliament.*"

25. The Minister of the Interior submits to the French Chamber of Deputies a proposed law for preventing frauds in forming the electoral lists, such frauds being one of the principal grounds of complaint against the ministry of M. de Villèle.

26. His Majesty's first levee for the season at his Palace, St. James's.

29. The British armament quits Portugal, with the exception of two regiments, left in occupation of the forts of Bugio and St. Julien (Lisbon), and one ship of the line in the Tagus.

#### *April.*

2. Opening of the Grand National Convention of Colombia at Ocana.

3. Orders for the future regulation and improvement of the practice of the Court of Chancery, issued by the Lord Chancellor. The Orders,

it was stated by the Chancellor, had been framed principally by the Master of the Rolls.

6. First stone laid of a monument to Albert Durer, at Nuremberg.

7. Arrival of the East India Company's ship *Research*, Capt. Dillon, at Calcutta, after ascertaining the fate of the French ships commanded by the Count de la Perouse. The *Research* had found, and brought to Calcutta, various articles of the wrecks of these vessels.

9. Insurrection, and discovery of a conspiracy against the Colombian government, and the influence of General Bolivar, of which General Padilla was the head. The insurrection was suppressed immediately by General Montilla, and Padilla saved himself by flight. This was followed by the proclamation of martial law throughout the province.

Establishment of a West India Company of merchants at Amsterdam.

10. Mutiny of the troops of Bolivia against General Sucre. The soldiers fired on the general, on his appearing amongst them, and wounded him. He ultimately succeeded in dispersing them, and in restoring order.

Motion carried in the French Chamber of Deputies, for abrogating the order made in the former session, giving to the Chamber a summary jurisdiction over the press.

Meeting of the ship-owners at the City of London Tavern, at which a resolution was passed, expressing their regret at the continued increasing depression of British shipping; and their conviction that it had been aggravated by the changes lately made in the navigation and commercial systems of the country.

The weavers of Kidderminster quit their employ in consequence of a reduction of wages. (They return to work in August, at the reduced wages, after suffering twenty-one weeks of extreme privation.)

18. The first column of the French garrison of Pampeluna quit that place, being the first step in the evacuation of the Peninsula by the French army of occupation.

23. His Majesty holds a drawing-room.

The French Chamber of Deputies adopt a proposition made by M. de Conny, for subjecting the members of the Chamber to re-election, on accepting certain offices under government. The division on the vote was 144 against 133. The proposition was subsequently rejected by the Chamber of Peers.

25. On the anniversary of the birth of the Queen Mother of Portugal, Lisbon becomes the occasion of a scene of tumult. A deputation of the municipality of Lisbon wait on Don Miguel, and pray him, in the name of the people, to assume the crown of Portugal. He replies that greater formalities are necessary previous to his taking that step.

Decree issued by the President of Greece fixing the division of Greece into departments, seven in number, viz. Argolis, Achaia, Elis, Upper Messenia, Lower Messenia, Laconia, and Arcadia. By the same decree the islands are divided into six departments, viz. The Northern Sporades, the Eastern Sporades, the Western Sporades, the Northern Cyclades, the Central Cyclades, and the Southern Cyclades.

26. Declaration of war by Russia against Turkey. The grievances alleged in the manifesto are, infractions of the treaties of Bucharest, (1812); and the Convention of Ackermann; the late Hatti Scheriff of the Porte denouncing Russia as an enemy, and avowing that it only accepted the conditions of the former peace, with a view to temporize; the sequestration of Russian cargoes, and violation of the flag; the efforts of the Porte to make Persia waver in her desire for peace. In another document, a declaration issued at the same time with the declaration of war, the Emperor states his reasons for the step he had taken, and declares his object in the war to be the future inviolable liberty of the commerce of the Black Sea, and the navigation of the Bosphorus. This statement is accompanied by an engagement, that Russia will not depart from the Convention of the 6th of July.

28. The Forts of Bugio and St. Julien, on the Tagus, given up by the British troops to the Portuguese.

*May.*

1. Confirmation of the death of Captain Clapperton at Sockatoo, on the 13th April, 1827, of a dysentery.

3. The Regent Don Miguel convokes the Assembly of the Three Estates according to the alleged ancient usage of the monarchy. In the decree containing this convocation Don Miguel had assumed the royal signature. On receiving notification of this decree the Foreign Ambassadors at Lisbon gave official notice that their functions had ceased.

Deliberation of the twelve judges on the question raised on the case of Gilham, the murderer of Maria Bagnall, at Bath, whether a confession of a prisoner induced by the expression of an opinion that such confession was necessary to his spiritual welfare, could be received in evidence. The decision was adjourned; but the sentence was subsequently confirmed—the convict underwent his punishment.

Opening of the Session of the Legislative Assembly of Brazil, at Rio de Janeiro. The speech from the throne announces that Spain was the only power which had not acknowledged the Brazilian empire; and contains a confirmation by the Emperor of his abdication of the Portuguese throne in favour of his daughter.

5. A national bank opened at Warsaw.

7. The Emperor of Russia leaves St. Petersburg for the army.

The troops of the 6th and 7th corps of Infantry of the Russian army pass the Pruth at Skuljanah Faltschi and Vadulni-Issaki in three columns. The Russian Colonel Loprand enters Jassy at the head of two squadrons of Uhlans.

9, 10. The agents of Austria quit Jassy and Bucharest.

At a meeting of country bankers, it was decided to memorialize the Treasury against the establishment of Branch Banks of the Bank of England.

The Albanian garrison of Coron, which had rebelled against the Ottoman Porte, submits to Ibrahim Pasha on receiving the news of the Russian Declaration of War against Turkey.

11. The fortress of Brahilow invested by the Russians.

A recruitment of the French army by a levy of 60,000 men of the class of 1827, ordered by the King of France.

12. The Russian General Baron Geismar takes possession of Bucharest, the capital of Wallachia.

13. The American Tariff Bill, imposing duties amounting to prohibition on the principal articles of manufacture of England, passes the American senate.

16. The soldiers of the garrison of Oporto renew the oath which they had taken to Don Pedro and the Constitution. The Constitutionals of that city establish a military council for the direction of affairs.

Death, at Toulouse, of Sir Wm. Congreve, General of Artillery in the British Service; the inventor of the Congreve rockets.

17. Death of Margaret Nicholson, in Bethlem Hospital, after a confinement of forty-two years as a lunatic, having been so declared upon her trial, for making an attempt on the life of George III.

Arrival of the Grand Duke Michael, the younger brother of the Emperor Nicholas, at the head-quarters of the Russian army before Brahilow, to assume the chief command of the siege of that place.

12—20. Arrival of the Emperor Nicholas in the Russian camp, at the village of Hadschi Capitan, near Brahilow.

20. Installation of the Bishop and Chapter of Rottenbourg, one of the new bishoprics of the Netherlands, created in virtue of the Concordat lately entered into between the Pope and the King of the Netherlands.



The military council of the City of Oporto, in concert with the deputies of the different estates, name a junta, for the-protection of the legitimate authority of Don Pedro.

20, 21, 22. Some Russian vessels, forming part of the fleet of Admiral Greigh, capture four Turkish vessels, with crews, amounting to 940 men, on their passage from Trebisond to Anapa.

22. The President of Greece issues a decree for the levy of one man in every hundred to complete the regular troops.

First Half-Quarterly Sessions of the Westminster magistrates; the Sessions being in future to be held eight times a year instead of quarterly.

23. The Greeks repulsed by the Turks in an attack on Anatolia, near Missolonghi.

The Marquess de Palmella, the Portuguese Ambassador at the Court of London, makes a formal declaration to the British Cabinet, that he ceases to consider himself as the envoy of the government actually ruling Portugal.

24. The minister of Brazil, in London, the Marquess Rezende, and the Viscount Itabayana, minister at Vienna, address an act of protestation to the Portuguese nation, dated from London, against every violation of the hereditary rights of Don Pedro, and of the Queen Donna Maria da Gloria, and against the abolition of the institutions established by Don Pedro.

The Thames Tunnel again opened for public inspection; the water having been entirely withdrawn from the shaft, and from the southern end of the Tunnel.

25. A brigade of troops leaves Lisbon on their march against the Constitutionalists of Oporto, advancing towards the capital. Numerous arrests of the inhabitants of Lisbon had taken place on the previous day.

26. The regular troops of the Turkish army quit Constantinople, under the command of Ali Pasha.

28. The Reis Effendi addresses a letter to Count Guilleminot and Mr. Stratford Canning, to induce them to return to Constantinople, and renew the ancient friendly relations between their respective governments and the Porte; and to enter into negotiations for the pacification of Greece.

Death of the Hon. Mrs. Damer, celebrated for her works in sculpture.

30. Mr. Huskisson, Earl of Dudley, Viscount Palmerston, and Mr. Charles Grant quit the ministry. The Earl of Aberdeen, Lord Lowther, Sir George Murray, Sir Henry Hardinge, Mr. Calcraft, and Mr. Courteney, were subsequently appointed to office. For the ministry as at present constituted, see "British Almanac."

Commission appointed for inquiring into the state of the laws relating to the transfer of real property; the commission composed of Mr. Campbell, Common Law Barrister, Head of the Commission—Mr. Tinney and Mr. Duckworth, Equity Barristers—Mr. Hodgson and Mr. Brodie, Conveyancers.

#### *June.*

4. Declaration published by the Turkish Divan in answer to the Manifesto of Russia. This document expresses the indignation of the Porte at the terms of the Convention of the 6th of July, and at the affair of Navarino; charges Russia with confirmed enmity towards the Turkish empire; treats the grievances complained of as imaginary; and justifies, on the plea of the necessities of the capital, the seizure of foreign cargoes.

5. The Chevalier de Barbosa, the Minister of Portugal at the court of the King of France, declares the cessation of his functions as minister.

8. Passage of the Danube by the Russian advanced guard. The Russians make an attack from the river on Isatzka (Isakska, Isaksdehe, Isadsje,) on the right bank of the Danube, which they take, and succeed in landing eight battalions of artillery. The Emperor followed on the

10th; in the course of that day and the 9th, the main army had crossed the river and occupied the positions abandoned by the Turks.

Death of the Rev. W. Coxe, Author of *Travels in Switzerland*, &c.

Death of Lieut.-Col. Dixon Denham, at Sierra Leone.

Death of Mr. Woodhouse, F.R.S., Lucasian Professor of Mathematics at Oxford.

9. A Russian flotilla on the Danube destroys thirty-five Turkish vessels. By this success all communication between Brahamlow and the right shore of the Danube was effectually intercepted.

10. Death of the Field Marshal Lauriston, Peer of France, born at Pondicherry, 1768.

11. Mutiny of German and Irish troops at Rio Janeiro. They refused longer to serve as soldiers, having come there by invitation as agriculturists. They commenced the plunder of the city; about 100 people lost their lives. The Emperor, at the head of Brazilian troops and Marines from the British and French ships of war in the port, succeeded in quelling the tumult, and shipping off the rioters in detachments to different parts of the Empire.

Death of Professor Dugald Stewart at Edinburgh.

Grand Convention of the Colombian Republic at Ocana, dissolved by the secession of the members in the interest of General Bolivar, without any effectual deliberations.

13. Bolivar proclaimed Dictator at Bogota.

13. Sir John Doyle seized at Leiria, and taken prisoner to Lisbon, charged with being connected with the Constitutionalists.

14. Judicial commission issued by Don Miguel to go through the kingdom, put on their trial, and execute the persons engaged in the recent insurrection.

Death of Charles Augustus, Grand Duke of Saxe Weimar, at Graditz, near Torgau.

Lord Mountsandsford killed at Windsor in an affray with a party of journeymen shoemakers. Two of the persons engaged in this unhappy event were afterwards found guilty of manslaughter.

15. Disastrous gale at the Cape of Good Hope: four vessels wrecked.

Accident in the church of Kirkaldy, in Scotland, by the falling of a gallery during the assembly of a large concourse of persons to hear an evening discourse by the Rev. Mr. Irving. Between 30 and 40 persons were killed.

16. The King of France signs a decree by which the secondary ecclesiastical schools are submitted to the rules of the University of Paris; the same decree declares that no person shall be engaged, in the direction of any establishment for education, unless he attests in writing that he does not belong to any religious society not legally established in France.

19. After a bloody and unsuccessful attempt to take Brahamlow by storm, a capitulation for the surrender of that fortress was concluded between the Grand Duke Michael, chief in command of the Russian besiegers, and Soliman Pasha, the Turkish commander of that place.

21. Execution, at Lisbon, of nine students of Coimbra, for the assassination of the professors sent as a deputation to Don Miguel by the University.

Meeting at the Freemason's Tavern, at which resolutions were passed and a subscription entered into for the establishment of an institution for the education, in the principles of the Established Church, of youth in the metropolis, to be called the Kings' College. The Duke of Wellington in the chair.

22. The Imans of Constantinople receive the Sultan's firman, calling to arms the whole population from the age of sixteen to sixty years.

The Governor of Madeira, Don John Lucio Travassos Valdez, proclaims his fidelity to Don Pedro, and his opposition to Don Miguel.

23. After a siege of 40 hours the Turkish garrison of Anapa, 3,000 strong, surrenders at discretion to the Russian Admirals Greigh and Menciokoff: 85 pieces of artillery fall into the hands of the conquerors.

In pursuance of a capitulation concluded with Ischim Pasha, the Russians, under the orders of Lieut.-General Prince Madatow, occupy the Turkish fortress of Hirsova (Girsow, Kirsowa), after a siege of seven hours: the garrison proceeds part to Schumla, part to Silistria.

24. Decision by the twelve judges in the case of Howarth, the Frome burglar, that a stabbing in defence, by a burglar, against caption without warrant, although the caption was not attempted until after the prisoner had quitted the premises, the scene of the burglary, constituted a felony within the meaning of Lord Ellenborough's act.

The new London Corn Exchange opened.

The Army of Don Miguel is victorious over that of the Junta of Oporto at Condeixa.

25. The three estates of the kingdom of Portugal declare that, according to the fundamental laws of the monarchy, Don Miguel is the legitimate King of Portugal.

Acknowledgment by the British government of the blockade of Oporto, by official notification from the minister of Foreign Affairs.

26. The Marquis Palmella, Count Villaflor, Generals Saldanha and Stubbs, arrive with their companions at Oporto from England. The Marquis Palmella assumes the chief command of the constitutional army: General Stubbs that of the Northern Provinces and of Oporto.

Convention concluded between Great Britain and Spain for satisfying the claims of British merchants; the Spanish Government agreeing to pay 900,000*l.* by instalments of 200,000*l.* a quarter.

### *July.*

3. The Miguelites under the command of the Marquis de Pesqueena, take possession of Oporto, observing the strictest discipline. The Marquis Palmella and others, leaders of the Constitutionalists, embark for England.

Lord William Bentinck arrives at Calcutta.

4. The infant Don Miguel formally accepts the title of King, pursuant to the representations addressed to him from the three estates.

Suicide of Montgomery, convicted of forgery, in Newgate. The prisoner was found dead in his cell on the morning appointed for his execution.

Lord William Bentinck lands at Calcutta, and assumes the office of Governor-General.

5. Mr. Daniel O'Connell elected Knight of the Shire for Clare in opposition to Mr. Vesey Fitzgerald.

The judgment of the Court of Chancery, depriving Mr. Long Wellesley Pole of the guardianship of his children, affirmed by the House of Lords, *nem. dis.*

6. Action between the Constitutionalists retreating from Oporto, and the Miguelites, at Valdeste. The Constitutionalists are defeated and the greater part disperse themselves: the rest retire beyond the Spanish frontier.

Peace concluded between the Republics of Peru and Bolivia. By the terms of this treaty, the Colombian Auxiliary Army was to quit Bolivia.

12. Meeting of armed Irish in the neighbourhood of Ballinamore. They are dispersed by a charge of the military without bloodshed.

The three estates of Portugal dissolved by decree of Don Miguel.

17. Sailing of the first division of the French expedition to the Morea from Toulon.

18. Decree of Bolivar, for letting to farm the Factories of Tobacco throughout the Republic of Colombia. The duties are charged with the payment of the interest of the Colombian bonds due in England.

20. Encounter between the populace and military at Fermoy in Ireland, where a numerous populace had assembled to celebrate the election

of Mr. O'Connell. The armed police fired on the mob: four persons were wounded, one mortally.

Attack on the eminences above Shumla, which, after an obstinate resistance from the Turks, are occupied by the Russians.

21. Death of the Archbishop of Canterbury (Sutton) at his palace at Lambeth.

23. Silistria invested by the Russians.

26. The Catholic Association in Ireland resumes its sittings according to its original institution, the act of 1825, for its suppression, having expired.

29. The mansion of G. Lane Fox, Esq. at Bramham Park, destroyed by fire. Loss estimated at 40,000*l*.

31. Expedition of men of letters and science, with M. Champollion, jun. at their head, supported by the French Government, for the investigation of the antiquities of Egypt, embarks for Alexandria.

### *August.*

5. The Emperor of Russia arrives at the head-quarters of the division of the army engaged in the siege of Varna, and after superintending the opening of the siege of that place, embarks for Odessa.

6. The Viceroy of Egypt concludes a convention with the British Admiral, Sir Edward Codrington, for the evacuation of the Morea by his son, and the delivery of the Greek captives.

Trial at Bury St. Edmund's of Wm. Corder for the murder, on the 18th of May, 1827, of Maria Marten, 'a young woman whom he had decoyed from her home to a barn near Polstead, and there murdered. The prisoner was found guilty and afterwards confessed the crime. He was executed on the 11th. An extraordinary excitement throughout the kingdom was produced by this murder and trial.

7. Vigorous sally by the Turkish garrison of Varna on the besiegers.

Fourteen sail of Turkish flotilla cut out of the port of Varna by the long-boats of the Russian squadron.

Decree issued by Bolivar for augmenting the army of the Colombian Republic to 40,000, in consequence of the accumulation of Spanish troops in the Havannah, which threatened Colombia.

The French prelacy address a representation to the King, remonstrating against the ordonnances of the 16th of June for the regulation of the ecclesiastical schools of France.

9. Expedition against Terceira and Madeira sails from Lisbon.

10. Conference concerning the affairs of Greece between the Plenipotentiaries of Great Britain, France, and Russia, resumed at Corfu.

11. The King and Queen of Spain return to Madrid, after nearly a year's absence.

Disappearance of Mr. Austin, Deputy Treasurer of Greenwich Hospital, in consequence of the discovery of a deficiency in his accounts to the amount of 20,000*l*.

12. Resignation of the Duke of Clarence of the office of Lord High Admiral.

14. The blockade of Funchal in the island of Madeira, notified at Lloyd's.

18. Sally made by the Turkish troops entrenched at Calafat. They advanced as far as Czoroi on the road to Crajora, and seized on several thousand head of cattle and other provisions and ammunition. The Russians were obliged to retire before them until General Geismar, having received reinforcements, succeeded in driving them back.

21. Vigorous sally by the Turkish garrison of Varna, in which they are repulsed; on the side of the Russians, the Commander, Prince Menzikoff, seriously wounded and disabled. Appointment of Count Woronzow to the direction of the siege in his stead.

Convention signed between France and Brazil for the indemnity of the proprietors of French vessels seized and condemned in the river Plata.

23. Attack on Tripoli by the Neapolitan squadron. The bombard-

ment lasted until the 28th, but without effect. On the 29th the squadron got under weigh. The Christian residents thrown into consternation by the menaces of the populace, but no outrage committed.

Madeira taken possession of by the expedition sent out by Don Miguel. Valdez, the late Governor who had remained faithful to Don Pedro, takes refuge on board an English vessel; Captain Canning, the commander, refuses to give him up.

24. A Turkish army of 30,000 men defeated under the walls of Akhalzik by the Russians commanded by General Paskewitsch. The Turkish camps and magazines taken possession of by the Russians. The Russian Major-General Korolkow killed.

26. A detachment of Turks from the entrenched camp at Shumla make a sally on the Russian lines, and succeed in capturing a redoubt, which the Russians retake. The Russians subsequently concentrate their forces, and abandon their position of Eski Stamboul, which they had occupied in advance of Shumla.

27. Nine persons drowned in the Thames, at Datchet, by the upsetting of a boat with passengers returning from Egham races to Windsor.

28. At a meeting of the Dublin members of the late Grand Orange Lodge of Ireland, it is resolved to re-establish that Society in Dublin. Brunswick Clubs formed.

29. Ten persons drowned in Loch Lomond, by the upsetting of a ferry boat alongside of the steam-vessel, the Lady of the Lake.

Preliminary Treaty of Peace concluded at Rio Janiero between Brazil and Buenos Ayres, establishing the independence of the Banda Oriental, under the guarantee of Great Britain, and the evacuation by the Emperor of the Brazils of that province and Monte Video.

Arrival in the Morea of the first and second divisions of the French expedition. A landing effected without opposition, and a camp established at Petaldi.

### *September.*

1. Don Gerres Pedraza, late Minister of War, is elected President of the Mexican Republic. His rival candidate was Don Vincente Guerrero. St. Anna, the Governor of Vera Cruz, on learning the result of the election, revolts from the government, and declares war on the existing authorities.

2. The Emperor Nicholas sets sail from Odessa on his return to Varna. Decree of the President of Haiti regulating the qualifications of commission merchants in St. Domingo. Registered patent necessary: duty of  $1\frac{1}{2}$  per cent. on the value of every consignment for foreigners,  $\frac{1}{2}$  per cent. for natives.

3. The fortress of Ardoghan in Asia surrenders to the Russian forces under Major-General Bergmann.

5. Official declaration of the existence of a fever of a suspicious nature at Gibraltar; a cordon of health established at the frontiers, at the instance of the authorities of Cadiz. On the 8th, a proclamation issued for closing the courts of justice and places of worship.

On the 29th September, the numbers in the hospital amounted to 533, from 12 to 17 were dying daily: out of 1135 since the commencement of the calamity 191 deaths had occurred. On the 18th, 19th, and 20th October, the daily numbers of deaths were 29, 32, 23; on the 14th, 15th, 16th, and 17th November, the numbers of deaths were 8, 8, 2, and 10. Derby Musical Festival.

7. Release of Sir John Doyle and Mr. Young from the dungeons in which they had been confined by the command of Don Miguel. They embarked on the same day on board a steam-vessel for England.

9. The fortress of Badjazet captured by the Russians. The fortress of Topah Khale occupied on the 24th.

13. Proclamation of Bolivar to the Colombians. As the minister of the Sovereign People, he engages to obey their legitimate desires; to protect

religion; to cause justice to be observed; to exercise economy in the administration of the public funds; to discharge the obligations of the Republic towards foreign states and individuals; to resign the supreme command when the people require its restitution; to convoke the national representation within a year, unless otherwise commanded by the people.

Decree by the President of Colombia, prohibiting the delivery of Letters of Marque, and recalling old ones, until a new system, which should provide for the prevention of outrages on neutral vessels, should be established.

15. Orange meeting at Dublin; letter read from the Duke of Cumberland accepting the office of Grand Master of the Orange Men of the United Kingdom.

18. The Duke of Newcastle addresses a public letter to Lord Kenyon on the danger of acceding to the claims of the Catholics for Emancipation.

First Brunswick Club formed in England, at a meeting at Maidstone. The Earl of Guilford appointed President of the Club.

The Bosphorus closed by the Turkish Government.

21. Cadiz evacuated by the French garrison.

22. A French brig arrives at Egina from Alexandria, with 200 Greek prisoners exchanged in Egypt.

23. York Musical Festival. 2,500*l.* surplus receipts.

Death of Professor Bouterwek, of the University of Gottingen.

24. Arrival at Falmouth of the young Queen of Portugal, Donna Maria da Gloria, in the Imperatrice, Brazilian Frigate; she was received amidst a royal salute of 21 guns, from Pendennis Castle and from all the ships of war then in the harbour, by the Mayor and Corporation of the town, and the Marquis Palmella, and Count Itabayana.

Two dilapidated houses in Exeter-street, behind the Lyceum theatre, fall in and bury the inmates in the ruins. Several were extricated alive, but three persons lost their lives.

25. Conspiracy against the life and government of General Bolivar, directed by the late Vice-President Santander and General Padilla. A part of the garrison, having been seduced, attacked the residence of the general, who narrowly escaped with his life. His aids-de-camp, Colonels Bolivar and Ferguson, were killed. The conspiracy was defeated: 4000 inhabitants rose in favour of the general; and the chief conspirators, among whom was Santander, were apprehended. Padilla was previously in prison.

The Hon. Captain Canning (son of the late Prime Minister), in command of his Majesty's ship Alligator, off Madeira, drowned while bathing in a reservoir.

26. Engagement at Czoroi between the troops of the Russian General Geismar and those of the Turkish Pasha of Widdin. The Turks were completely routed in a night attack, with great loss of men and artillery, and driven back to Calafat.

The Sultan leaves Constantinople for the camp at Ramestschifik, with the Sacred Standard, for the head-quarters of the Moslem army.

30. Manchester Musical Festival.

#### *October.*

1. Opening of the London University. Mr. Bell, professor of Physiology and Surgery, delivered his introductory Lecture to an audience of 800 persons, including the Council and officers, and a large proportion of the founders and promoters of the Institution.

Blockade of the Dardanelles by the Russians officially announced by the Secretary of State for Foreign Affairs to the Committee of Lloyds.

2. Proclamation by the Lord Lieutenant of Ireland calling on the magistrates to prevent assemblages of peasantry.

M. Caillet, a young Frenchman, arrives at Toulon, on his return from Africa, it being stated that he had penetrated to Timbuctoo.

4. Ibrahim Pasha, with the whole Egyptian armament, evacuates the

Morea, and sails for Alexandria in pursuance of the convention concluded with Sir Edward Codrington.

5. Surrender of Patras, by capitulation, to a detachment of the French army under General Schneider.

6. Navarino taken possession of by the troops of the French Expedition without any resistance from the Turkish garrison. Modon is occupied in the same way on the 7th, and Coron surrendered on the 9th.

Death of the Dowager Queen of Wurtemberg, Charlotte Augusta Matilda, Princess Royal of England, at Stuttgard, aged 62.

Dinner to Mr. Peel at Manchester; attended by 500 persons.

The Queen of Portugal arrives in London. She receives the compliments of the Duke of Wellington and other Ministers at Grillon's Hotel on the 8th.

9. Arrest of Mr. Lawless at Dublin on a charge of rioting, on information that he had entered Ballibay at the head of a mob of 20,000 persons. Mr. Lawless bailed and enlarged.

10. Coffee-houses at Lisbon shut by order of Don Miguel, and 40 shopkeepers arrested.

11. Surrender of Varna to the Russians.

15. The Russians commence their retreat from before Shumla, followed by the Turks, who attacked them on the 19th with a body of 8000 men, who were repulsed.

13. Death of Vincenzo Monti, the Italian poet.

16. Viscount Strangford arrives at Rio de Janeiro on a special mission from the King of Great Britain.

20. Sentence of death, passed at St. Kitt's, on twenty Spaniards and Englishmen, part of a piratical crew who had captured the Caraboo, on her voyage from Liverpool to Buenos Ayres.

22. Official notice published at Gibraltar of a contribution from the King of Spain of 20,000 fanegas of wheat to the relief of the necessities of the sufferers by want and famine in that fortress.

24. Kent County Meeting on Penenden Heath, when a petition to the House of Commons, praying that the Protestant Constitution in Church and State might be preserved entire and inviolable, was agreed on.

25. The St. Katherine's Docks opened.

26. The Emperor Nicholas arrives at St. Petersburg on his return from the seat of war.

Paspuschi Achmet, Governor of Galata and Pera, appointed by the Sultan, Capitan Pasha, in the room of the former Capitan Pasha, Izzed Mahomet, who had been nominated Grand Vizier (on the dismissal of the former Vizier), and appointed to the chief command of the Ottoman forces acting against the Russians.

Proclamation by the President of Greece, announcing that the Turks persisting to refuse to accede to the treaty of London, the three Allied Powers would recognise the independence of Greece. The fortress of Malta had exchanged salutes with a vessel entering the Port under the Greek flag.

28. Peace concluded between Naples and Tripoli by the intervention of the French Consul-General.

Calafat abandoned by the Turks, and occupied by the Russians under General Geismar.

Trial and conviction of Joseph Hunton, for forgery on the Bank of Sir William Curtis and Co.

30. Surrender of the Castle of the Morea, after a cannonade of four hours, to the French armament, thus completing the evacuation of the Morea by the Turks.

#### *November.*

4. The first General Meeting of the Brunswick Club of Ireland held in the Dublin Rotunda.

6. A Court of Common Council holden, at which a resolution was passed, that for the future the office of Secondary should not be sold.

Death of the Dowager Empress of Russia.

8. The siege of Silistria by the Russians raised; the heavy artillery abandoned. Bulgaria, with the exception of Varna, evacuated by the Russians.

9. Serious accident befalls Don Miguel while driving two of the Princesses, his sisters. The mules become restive and overturn the carriage. He escapes with a fracture of the ribs and thigh. The Infantas only slightly injured.

10. Siege of Silistria raised.

12. Extraordinarily dense fog in London and the vicinity.

14. Decree by the King of France for a new constitution of the Council of State: the members who had formed part of the Council under the Administration of M. de Villèle are dismissed, and others more in accord with the actual Ministry nominated in their place.

By other decrees, of the same date, important changes are ordered on the same principle in the appointments of Prefects of departments.

16. Opening of the Diet of Sweden. The King's speech notices the flourishing state of the internal affairs of the kingdom, and announces, that after meeting the expenses stated in the Budget and other unforeseen disbursements, a surplus of two million dollars had been appropriated to the Sinking Fund.

18. Accident at Covent Garden theatre by the sudden ignition of escaped gas while preparations were making for removing the gas apparatus of the theatre. Two workmen lost their lives on the spot, and three other persons received serious injury; two of whom afterwards died.

19. Keystone of the last arch of the new London Bridge fixed with the usual ceremonies by the Lord Mayor and Bridge Committee.

General Wittgenstein, the Commander-in-Chief of the Russian forces acting against the Turks, returns to Jassy, and there establishes the headquarters of the army.

20. Public announcement that wheat had reached the price at which the duty was lowest, and that the ports were open to foreign grain at a merely nominal duty.

24. Decree by Don Miguel, ordering the scrupulous observance of the legal privileges of British subjects, and despatch in the proceedings against such as might be accused of contravention of the law.

25. Public Meeting held at the London Tavern, Bishopsgate-street, to raise a subscription for the relief of the Spanish and Italian Refugees. The Lord Mayor in the chair.

#### *December.*

1. Destructive gale off the coast of Yorkshire. Thirteen vessels cast on shore near Filey, and eight at Whitby. Crews saved by lifeboats.

Fever abated at Gibraltar. On this day the deaths were only 4.

4. Death of the Earl of Liverpool, at Combe Wood.

7. Order of the day to the Portuguese soldiers in depôts at Plymouth, issued by General Stubbs, commanding them to prepare for embarkation for the Brazils.

8. The pupils of the Royal Academy of Music, under the direction of Signor de Begnis, perform the Italian Opera of *Il Barbiere di Seviglia*, at the English Opera House, being the first performance of a dramatic nature attempted by them in public.

9. His Majesty takes up his residence at Windsor Castle. Mr. Jeffery Wyatville, the architect, receives the honour of knighthood.

22. His Majesty receives the Queen of Portugal, with the honours due to her rank, at Windsor Castle.

Death of Dr. Wollaston, F.R.S.



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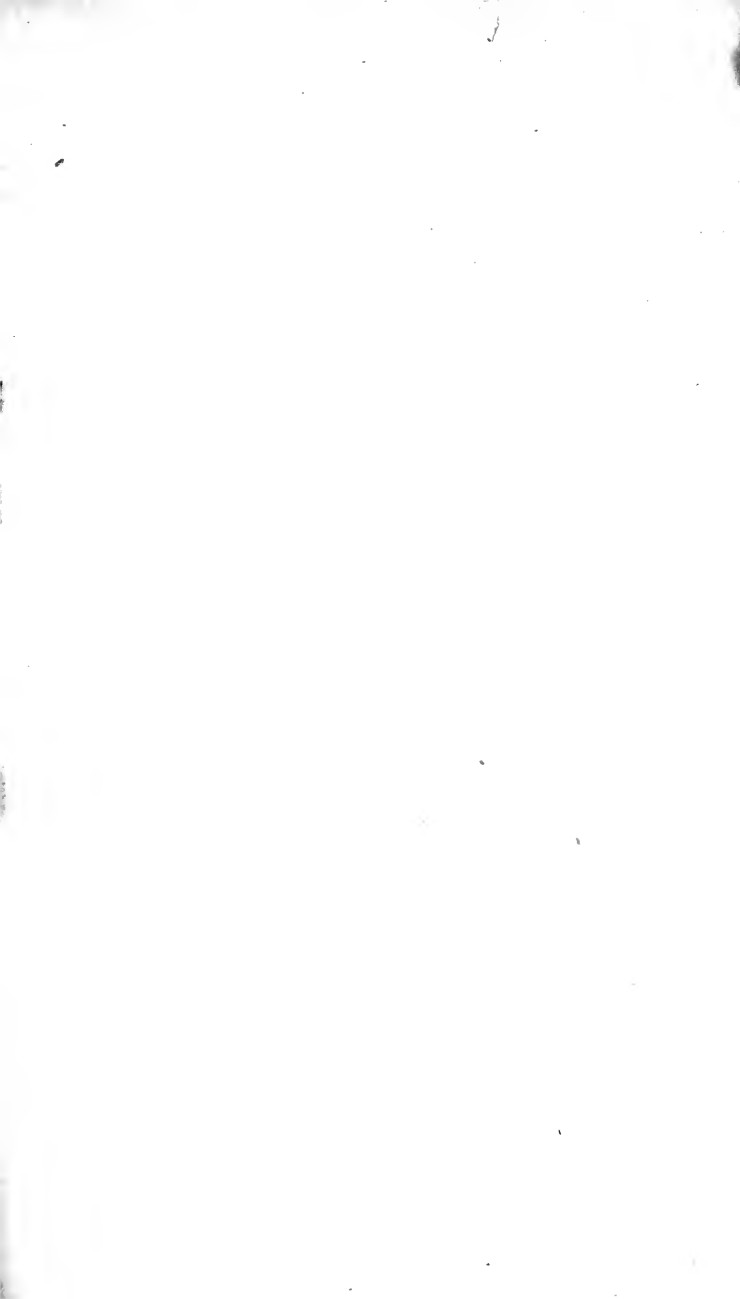
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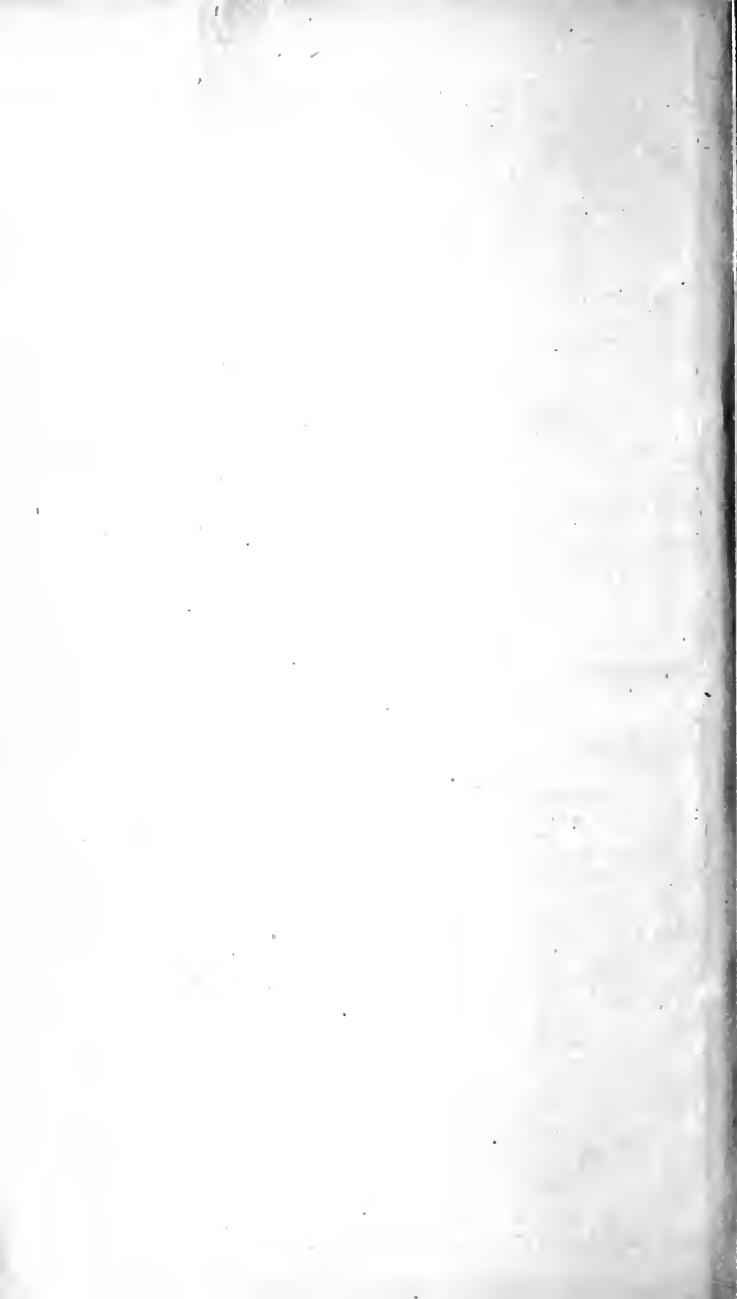
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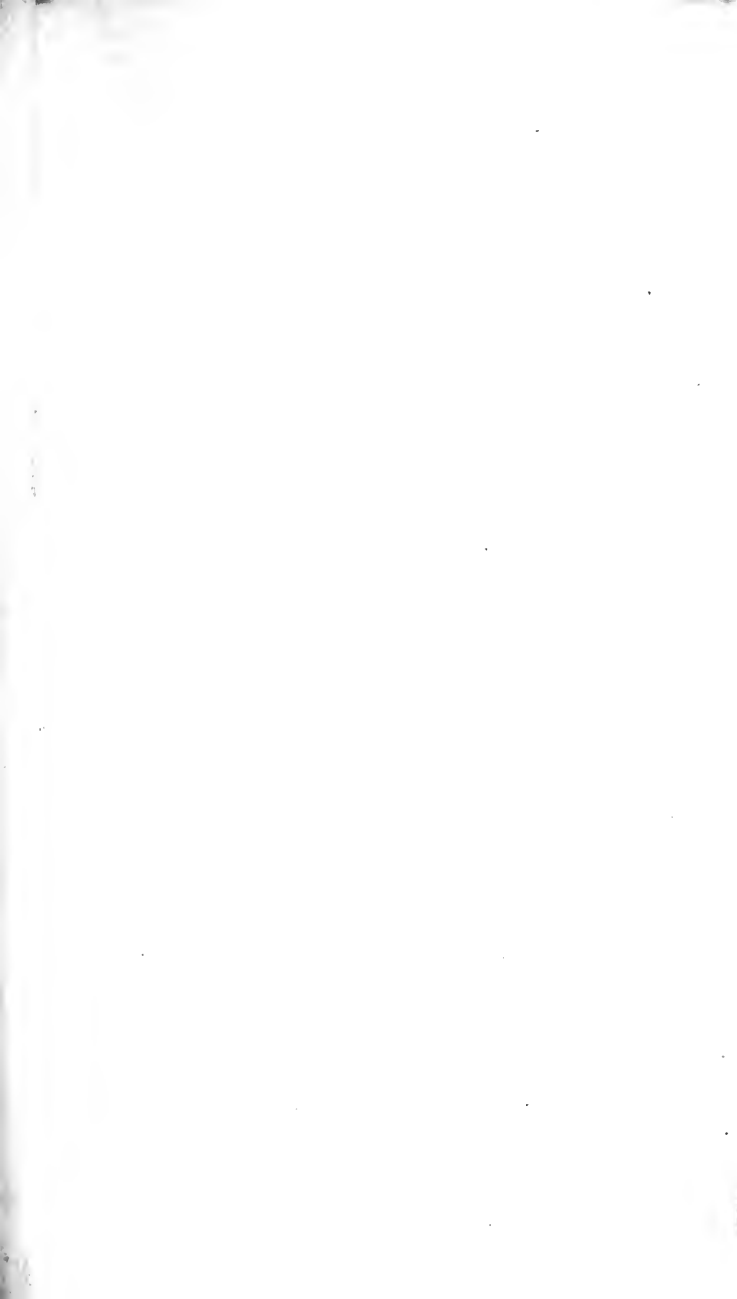
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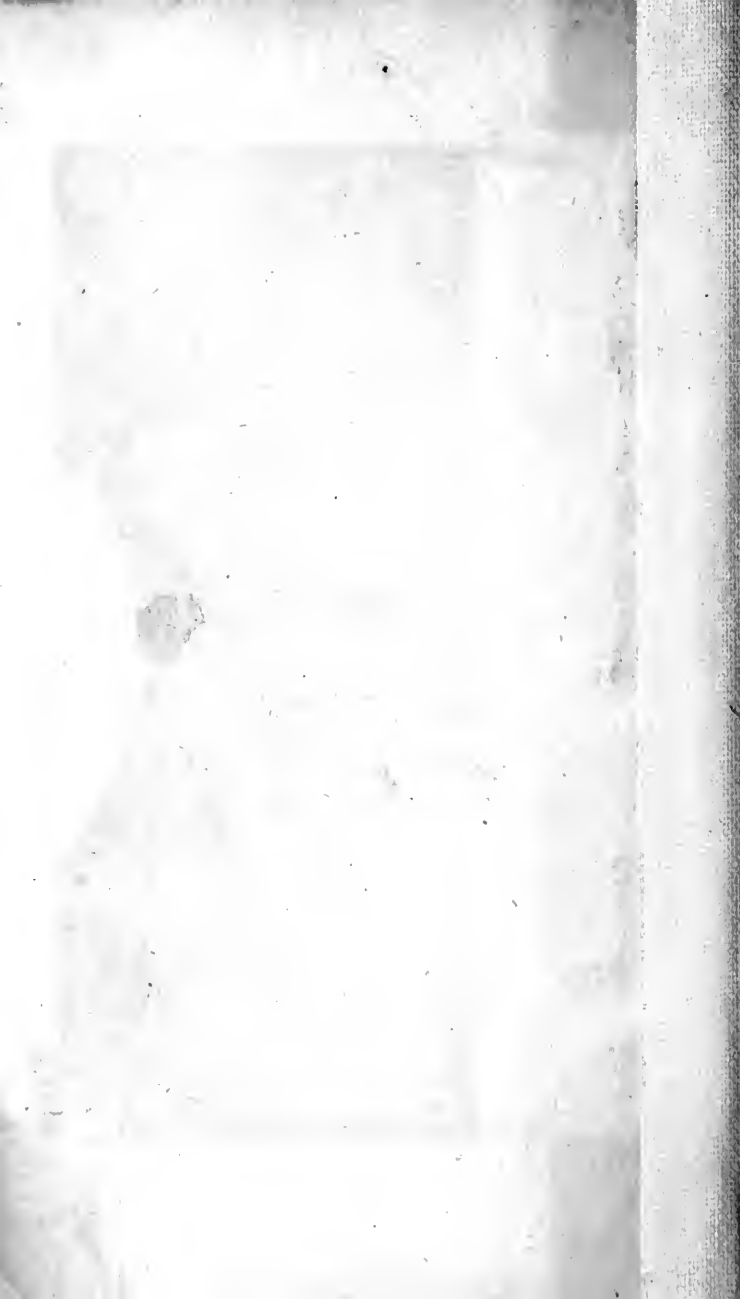
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